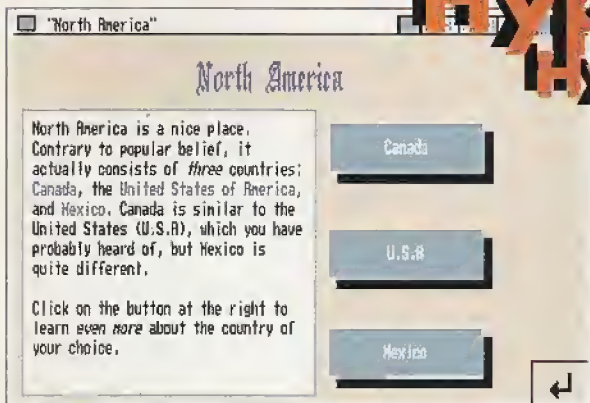
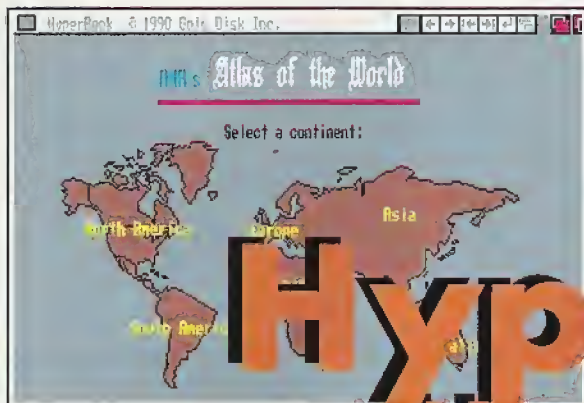


The Australian COMMODORE and AMIGA REVIEW



Cameron Handy SCANNER with OCR Reviewed

MathVISION - Mandelbrot Mathematics

Blue Max . MIG-29 . Blitzkrieg



Why is Computermate the market leader?

Customer Service



Product Knowledge



Availability



Product Support



Value



Largest Range



Australia's Leading Distributor of
Software and Accessories for



Phone (02) 457 8388
Fax (02) 457 8739

BIG ENOUGH TO BE PROFESSIONAL – SMALL ENOUGH TO BE PERSONAL.

ACAR

The Australian Commodore and Amiga Review

EDITORIAL

A meagre
editor
speaks! 2

RAM RUMBLES

User group
update 4

NOTEPAD

News &
info 8



The C64 Column
The versatile 64!
Sound & Graphics
More on sprites
GEOS Column
Mail merge

C64 / 128

O. James 53
G. Perry 42
O. James 34

AMIGA

G. Kimpton 11
A. Farrell 14
S. Kennedy 18
A. Leniart 48

GENERAL

J. Scowen 27
Readers 39

Communications
Crunching disks
Letters
Have your say!

EDUCATION

Playing Games? A.Glover 20
That's all they do!
1st Shapes A Glover 24
Design toys
1st Letters & Words A.Glover 25
A talking program
Mother Goose A Glover 26
Kor kids!

ENTERTAINMENT

That's Entertainment 57
News, Hints & Tips, Hall of Fame
Game Reviews 61
Horror Zombies, Blue Max,
Zarathrusta, Blitzkrieg,
Gamesmen Megapak, Mig-29;
Quick Shots 64
A first glance at new games:
Ilyad, 'Nam, Pro Tennis Tour II
Adventurer's Realm 70
Help, Hints, Problems, Chit-chat

Advertisers Index

79

Australian Commodore Review:
21 Darley Road Randwick, NSW 2031
Phone: (02) 398 5111
Published by:
Saturday Magazine Pty Ltd.
Distribution: NETWORK Distribution
Printed by: Ian Liddell Pty Ltd
Editor: Andrew Farrell
Production: Brenda Powell
Design & Layout: Andrew Dunstall
Subscriptions / back issues:
Darrien Perry (02) 398 5111
Entertainment Editor:
Phil Campbell

VOLUME 8
NO. 5
MAY
1991

Advertising: Ken Longshaw (02) 398 5111 or (02) 817 2509

Regional Computers

The Amiga Supermarket

SPECIAL: Amiga 2000 Computer \$1479

GVP 42Mb/F A500 Series II
\$959

GVP 52Mb/Q A500 Series II
\$1169

GVP A2000 HC8/52Mb/Q
\$1129

GVP A2000 HC8/80Mb
\$1199

☆ Amiga 500 computer	\$799.00
☆ Amiga 2000 Special	\$1479.00
☆ Amiga 2000/40 meg HD	\$2249.00
☆ Amiga 2000 Professional	\$1649.00
Amiga 3000/40	Call
Video Digitiser A500/2000	\$99.99
AT bridge board	\$779.99
Amiga Midi Interface	\$129.00
Sound Sampler	\$50.00

Memory Expansions

512k Ram expansions	\$69.99
512k with switch & battery	\$75.00
1Mb A1000/500 extern/O	\$199.00
2Mb A500 Internal/Ax	\$299.00
A500 Base Board 4Mb/0Mb	\$199.00
KC XT Board	Call
AT Once Board	Special Low Price

Modems

Maestro Modems 2400	\$265.00
Maestro Modems MMPS	\$379.00
Fax Modem Maestro 9600	\$379.00
Action Replay 2000	????

Hard Drives

GVP A500 40Mb Quantum	\$879.00
GVP 105Mb/Q A500 Ser's II	\$1559.00
GVP A2000 HC8/105Mb	\$1349.00
GVP A2000 HC8/170Mb	\$1870.00
Amiga A590 20Mb	\$579.00

Hand Scanner

IMG Scanner	\$289.00
Hand Scanner A500/2000	\$375.00
Cameron Scanner/Software Type 10	\$699.00
Cameron Scanner colour	\$1399.00
VIDI RGB Splitter	\$279.00

☆ **NX1000CL \$369.00**

Deluxe Amiga 500 Computer	\$1099.00
Video Amiga 500 PC	\$1499.00
Music Amiga 500	\$1199.00
Accelerator Board 68030/2	\$1299.00

This month:

Amiga 3000 computer \$4999.00

You never know how low I will go!

018 911 011 or 09 328 9062

PO Box E265, Perth 6001

611 Beaufort Street, Mt Lawley Perth 6050 WA

Printers

Star

L C10-II	\$299.00
LC24-10	\$499.00
LC15	\$579.00
LC24-15	\$749.00
LC200CL	\$449.00
NX1000CL	\$369.00
LC24-200 CL	\$699.00
LC24-200	\$599.00

Citizen coloured

GSX200	\$439.00
GSX140	????
GSX180D	\$299.00

Epson

LX 400	\$269.00
LQ 400	\$469.00
LX 850	\$379.00
LQ 550	\$559.00
LQ1010	\$749.00

Free cable this month

Disk Counts

3.5" DSDD	????
3.5" DSHD	\$18.00
3.5" Memorex	\$16.00
Lifetime Guarantee	

3.5 Internal Drive	\$159
3.5" External Drive	
5.25" Ext Drive	\$239.99
Action Replay MarkII	\$165.00

Amiga Mouse	\$39.99
1 Mb RAM exp A590	\$85
1 Mb Simms exp GVP	\$85

Genlock New Type
\$289

Public Domain

Fish 1/490 - Amicus	
Amigan - T-Bag	
Faug - Amaz - NZ	
17Bit. Amigoz	
Cost from	
\$1.49	
per disk	

Editorial

A few months ago I attended the launch of Compuserve in Australia at Fujitsu's head office here in Sydney. It sure was an interesting press conference, with the vast majority in attendance unfamiliar with the service, and mainly representing some kind of business PC publication. And here I was, editor of one of the only home computer magazines in Australia and we're being told Compuserve is used mainly by home computer users. So, I started asking questions. How many modem owners are there in Australia who might use this service? No comment. Why will this succeed when Discovery 40 and Discovery 80 offered by Commodore seem to be failing in the home market? Answer, because Compuserve is better. Problem is, at the moment, it's not much cheaper. To prove the point, Fujitsu offered all in attendance the option of a four week free trial password to the system. Not surprisingly, only a few accepted this once-in-a-life-time offer.



After that four weeks of use, I can honestly say Compuserve is much better than anything we have here. The trick is, Compuserve doesn't try to be an electronic alternative to every day information sources. Instead, the service offers information you can't get any other way. It also offers powerful research capabilities to access information you can normally find in a set of reference books - only using a computer you can find it much faster. Telecom think that people are going to queue up to pay for database search facilities for an electronic version of the white and yellow pages. Now some well-to-do business people who are not feeling the crunch of Australia's current economic climate might jump at that sort of thing, but the mass market appeal is very limited.

For a start, a phone book is about as fast, by the time you go to the right Discovery page, type in the name at 75 baud - if you're unfortunate enough to still be using the Discovery 40 service - then wait while it finds the name. Once you have it, it's still not as good as the phone book. You can't doodle on it as you speak to someone. You can't stand on it to reach high shelves, flatten bent pictures, biff a friend over the head or throw on the fire for heat when it's out of date. Somehow it's little wonder people don't want to pay \$40 an hour for such a service. If you're not on line when you decide you want the number, you've also got to wait while the computer dials in and you find your password, type it in and wait whilst you get logged on.

Compuserve is different. It offers catalogues of products that don't come in catalogues, you can play with car models, mix and match features and find out a price, you can get transcripts from television shows, look up an encyclopedia?adia, check out a reference listing on newspaper stories over the past ten years, talk to a special interest group about anything from computers to pet rabbits. Let's hope Fujitsu does kick off Compuserve here in a big way. If it works, the gateway to the American service Fujitsu will be offering may be improved to include some information held in a locally maintained computer system. No doubt, with enough users, there would soon be good reason to add some local service providers too. In case your wondering, Compuserve is purely text based. You don't have to waste time waiting for pretty graphics to appear. To help make the system easier to use, there are a number of front end packages which let you choose what you want before you login. Once you're connected, the program grabs the messages and files you want in one hit. With Compuserve available in Australia soon, maybe Telecom will improve their own system and pricing structure. □

Andrew Farrell

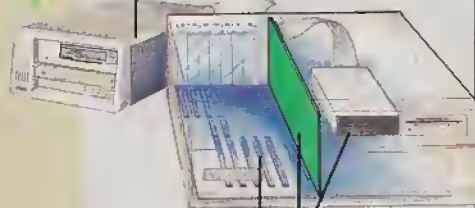
The Ultimate All-in-One Amiga® 2000 Add-on... 68030 POWER+16MB RAM+SCSI CONTROLLER

Replaces up to FOUR "normal" expansion boards!

IMPACT
Series II

Now, a 22 or 33 Mhz 68030 accelerator board, up to 16MB of 32-bit wide RAM and a high-performance SCSI hard disk controller in a single A2000® "CPU slot" expansion board!

Optional External SCSI Peripherals



All A2000 Expansion Slots Free

GVP All-in-One Board + SCSI Drive Installed

Check out these features:

- ✓ The perfect companion for NewTek's Video Toaster.™
- ✓ 22Mhz or 33Mhz factory installed, surface mounted, 68030 CPU and 68882 FPU.
- ✓ Up to 16MB of 32-bit wide memory expansion. 4MB minimum factory installed memory on 33Mhz version, 1MB minimum for 22Mhz.
- ✓ GVP's new custom 32-bit wide, 1MB or 4MB, SIMM32™ memory modules offer flexible, easy-to-install memory expansion. 22Mhz model has 1MB factory installed memory, expandable to 13MB. 33Mhz model has 4MB factory installed memory, expandable to 16MB.
- ✓ On-board high-performance "Series II" auto-booting SCSI controller with factory installed FAAASTROM SCSI driver and SCSI connectors for attaching both external and internal SCSI peripherals.
- ✓ Direct DMA access to the full 16MB range of 32-bit wide memory expansion by the on-board SCSI controller. Due to the A2000 bus architecture, this is ONLY possible when SCSI controller is placed directly on the 68030 CPU bus (as is

the case with the A3000!). Provides ultimate SCSI hard disk performance!

- ✓ GVP's legendary FAAASTROM SCSI driver supports virtually all SCSI devices currently on the market, including hard disk drives, CD-ROM drives, Magneto-Optical drives, removable media drives and tape drives.
- ✓ Switch to 68000 mode by simply clicking on our new "68000 Mode" icon, or include our special "mode switching" utility in your startup-sequence and select required mode each time system is rebooted, by holding down mouse buttons.
- ✓ Provides the ultimate expandability of your A2000 system. Plugs into the "CPU accelerator" slot, thereby leaving ALL FIVE A2000 expansion slots free for future expansion.

Internal SCSI Hard Drive (3.5" available up to 340MB!)

Built-in GVP Series II DMA SCSI Controller

Surface-mounted 68030 CPU and 68882 FPU (22 or 33Mhz)

SCSI Connector for external SCSI peripherals

1MB (22Mhz) or 4MB (33Mhz) Surface-mounted 32-bit wide Memory

Up to 12MB of 32-bit wide, User-installable SIMM32 Memory Expansion



COMPARE:	A2000 +GVP All-in-One	Commodore A2500/30	Commodore A3000®
68030 CPU and 68882 FPU	Y	Y	Y
Maximum CPU clock speed available & shipping TODAY	33Mhz	25Mhz	25Mhz
Maximum 32-bit wide FAST memory on 68030 CPU board	16MB	4MB	16MB
Direct DMA access to more than 8MB of fast memory	Y	N	Y
DMA SCSI controller built-in on 68030 CPU board	Y	N	Y
Number of open Amiga expansion slots with 68030 CPU, SCSI controller and more than 4MB fast memory installed	5	3	4
RAM upgrades through easy-to-install 32-bit wide SIMM memory modules	Y	N	N

GVP

Distributed in Australia by

Power Peripherals Pty. Ltd. Expansion Solutions

P.O. BOX 555, LAVERTON, MELBOURNE, VIC 3028 AUSTRALIA
PHONE: (03) 369 7020 FAX: (03) 369 4342

SIMM32 and GVP are trademarks of Great Valley Products, Inc.
Amiga, A2000 and A3000 are registered trademarks of Commodore-Amiga, Inc.
Video Toaster is a trademark of NewTek Inc.

Ram Rumbles

Media Spottings and Applications

Don't forget we're looking both for Commodore computers in the media and at work, in Ram Rumbles this year. Starting next month, the best published letter will receive a free one year subscription to *The Australian Commodore and Amiga Review*.

Now to kick things off - the incredible finding that O.T.C. have not one but several Amigas chugging away.

One machine has an AT bridge-board which captures data from a larger computer regarding every overseas call made by means of a special program and an 8-port serial card. This is transferred to the Amiga and recorded onto one of two 600Mb optical drives, with a 600Mb Fujitsu hard drive handling primary storage requirements. When a customer complaint is received, O.T.C. can interrogate the Amiga to find out what problems occurred at the same time as the reported difficulty in a bid to locate the cause of the fault.

The Amiga also displays a large world map with a flashing red dot pin-pointing world trouble spots in the event of an earthquake or other disaster which leads to a mass call failure - hundreds of phone links banking up with nowhere to go.

Yes, it's all done on the Amiga. More on this installation soon!

Ground Zero

On the 18th of March, Ground Zero was about gas testing at Maralinga. In the movie we see a man loading up a banking program on a 1541 disk drive. Unfortunately the computer was obscured by darkness - but it must have been a C64 or C128, according to our informant Mr A. Gromly of Walkerville, S.A.

PC91

Commodore were obviously missing from this event, apart from a smallish stand operated by the Hard

Disk Cafe. Congratulations folks on a great effort at the show, but surely Commodore's range of machines aren't so unique that they can sit back and happily rely on their own show - World of Commodore, July 12 - 14. Many other manufacturers showed off publishing, presentation and animation packages. Indeed, many stands had live presentations rolling all day. The Amiga could have turned a few heads at this event.

User Group Update

Eastern Suburbs Commodore Users Group

* NEW ADDRESS *
P.O. Box 375
Padstow 2211
Secretary: (02) 779 666
Fax: (02) 774 1165

West Lakes Amiga User Group S.A.

West Lakes Shore Primary School
Edwin St, West Lakes
Contact: Tom Grant on (08) 493690
Meetings: Fortnightly, Sunday 3.00pm.

Gympie Amiga Users Group,

c/o Mail Service 183,
8 Rocks Rd, Gympie QLD 4570
Contact: N. Andreson (Sec).
Phone: 82 4072 or 825671.

CDTV Movie Reviews

Fancy yourself as the next Bill Collins? VOLITION Software is looking for people who might like to contribute movie reviews for a forthcoming CDTV release, *Ten Thousand Movies On CD*. You'll need to have the time to contribute up to 500 reviews in a period of a year or so, about 10 every week. Once the disc is released you'll be earning royalties on every sale. Reviewers with computers and modems are especially welcome. For more information write to: Movie Reviews, P.O. Box 158, Darlinghurst 2010.

Cursor Curses

Commodore Review

In the April Cursor newsletter of the Commodore Computer Users Group Qld Inc, the librarian ever so tactfully points out that in his humble opinion our magazine rates a mere 2 out of 10. He also observes that our covers are always atrocious, and that we never print the year on the cover - a real annoyance for a librarian.

Continued on p6

UPDATE COLUMN

This update column is coming to you from thousands of miles away. Once again, I am in the UK searching out the latest and greatest in software to bring back to Australia for Pactronics to distribute.

In education software, we have a brilliant new educational adventure, *RODY AND MAS-TICO*. Kids love it, because they can control their characters, colour in the screens, save screens, load screens and print them out. It's a brilliant, full colour, icon controlled game that teaches as you play!

Books, books and more books; the Abacus range of Amiga books continues to grow with their latest edition:

BEST OF AMIGA TRICKS AND TIPS. This is a compendium giving literally hundreds of tips on how to get the most out of your Amiga.

Over the last few months, we have witnessed the growing popularity of Strategy / Simulation games. To augment our range, Pactronics now have some of the hottest simulation games around!

TOWER FRA - Airport Traffic Control simulator

ACTION STATIONS - Naval Simulator covering the years 1922-1945

THE FINAL CONFLICT - World Wide Political Simulator

WHITE DEATH - WW II simulator of the Russian Front

BLITZKRIEG - Battle of the Bulge simulator

RORKES DRIFT - Boer War Battle simulator

One final word about AMOS! Buy it! AMOS is proving to be THE hottest Amiga title in town. No other language gives you the flexibility and control offered by AMOS.

Beauty and Functionality Redefined

THE NEW **IMPACT** SERIES II™ A500-HD+

The Next Generation in Amiga® 500 Add-On Peripherals

IMPACT

Series II

Turn your A500® into a
Serious and More Fun
Computing Tool Today!

GVP's New **SERIES II**
A500-HD+ is The Ultimate in
Hard Drive, Memory and
Expandability for your Amiga 500.
Major features include:

Leading Edge

Same high-tech custom VLSI and
FAASTROM™ features as GVP's new
Series II A2000 SCSI-RAM Products.

Foresight

Unique new "Mini-Slot"™ brings out
all the A500 expansion bus signals,
allowing for exciting future expansion
options – the only intelligent
alternative to risky "Pass-Through"
functionality.

Reliability

Includes internal fan to keep you cool
and robust power supply ensuring your
A500 power supply will not be
overloaded. GVP will not compromise
on quality and reliability!

Memory Expansion

Internal RAM Expansion up to
8MB using easy-to-install SIMM
memory modules.

Sleek

Custom injection-molded styling
perfectly matches your A500 for
unequaled beauty and elegance, setting
a new standard for A500 peripherals.

State-of-the-Art

New 1"-high internal hard disk drive;
available from 40MB through 100MB.

Performance

Provides no-compromise hard disk
performance which until now has
never been seen on the A500.

Seeing is Believing

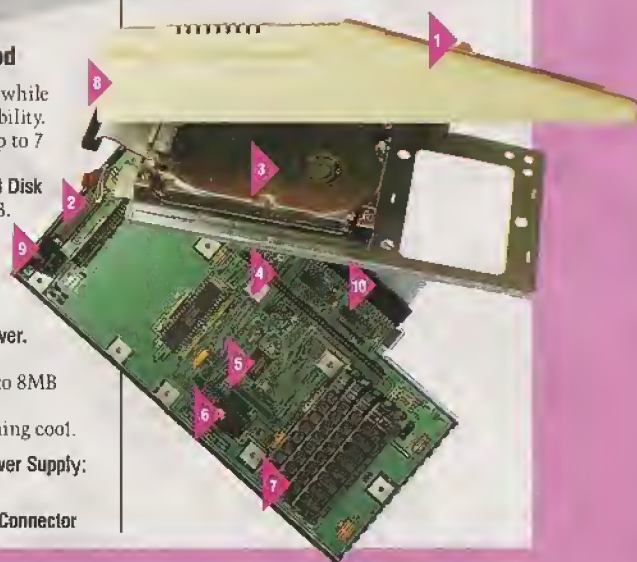
Take one for a Test "Drive" at your
nearest GVP Dealer today!

Call for Special End-User
Trade-Up Details!



Take a Look under the Hood

- 1 Game Switch: Enables RAM while enabling full game compatibility.
- 2 External SCSI Port: Allows up to 7 SCSI devices to be attached.
- 3 1"-High Factory-installed Hard Disk Drive: 40MB through 100MB.
- 4 "Mini-Slot": For future expansion options.
- 5 GVP's Custom VLSI Chip.
- 6 GVP's **FAASTROM** SCSI Driver.
- 7 Internal RAM Expansion: Up to 8MB
- 8 Internal Fan: Keeps you running cool.
- 9 Dedicated Universal Input Power Supply: Included.
- 10 Reinforced 86-PIN Card Edge Connector



GVP

Distributed in Australia by

**Power
peripherals** Pty. Ltd. Expansion Solutions

P.O. BOX 555, LAVERTON MELBOURNE, VIC 3023 AUSTRALIA
PHONE: (03) 369 7020 FAX: (03) 369 4342

Educational pricing program now available.

Series II, **FAASTROM** and GVP are trademarks of Great Valley Products, Inc.
Amiga and A500 are registered trademarks of Commodore-Amiga, Inc.

★ SUBSCRIBE ★

The Australian
COMMODORE
and **AMIGA REVIEW**

*Make sure of
getting
your copy
Subscribe now!*

Please enrol me for _____ issues
subscription to The Australian
Commodore and Amiga Review,
commencing with the _____
issue.

I enclose a cheque/money order
for \$_____

Please charge my Bankcard

Bankcard number: _____

Expiry date: _____

Name: _____

Address: _____

Postcode: _____

Please tick applicable box

First Subscription ☐

Renewal ☐

TO: The Australian
Commodore
and Amiga Review
21 Darley Road,
Randwick NSW 2031
(02) 398 5111

Rates within Australia:

6 issues \$19.00 (inc postage)
12 issues \$36.00 (inc postage)
Minimum OS postage \$35.00 AUS
(Air Mail) more for some countries

If you don't want to cut this out
photocopy it or just send a letter.

★ NOW ★

He also states that our program
listings are always suspect - strange
considering over the last year or
more most of the listings we have
printed were provided by the Club's
President, Greg Perry.

As for our covers, point taken,
but then we've always prided our-
selves in great editorial which has
made possible our survival and in-
deed amazing growth over the past
eight or more years of publication.
We're working on the covers - see the
last couple of issues!

As for the measly 2 out of 10 rat-
ing, I refer to the comment which ap-
pears on the very next facing page
13... "Australian Commodore and
Amiga Review are making a great ef-
fort on behalf of C64/C128 and Ami-
ga. Support them." and on the next
page "...read ACAR." Well Mr. Librari-
an, up your nose with a rubber
hose!! □

C64 SOFTWARE

EXTENSIVE RANGE OF PUBLIC
DOMAIN SOFTWARE FROM UK,
USA, AUSTRALIA.

EACH DISK CONTAINS MANY
EXCITING PROGRAMS FOR ONLY
\$5 PER DISK.

● SPECIAL ●
INTRODUCTORY
OFFER

5 DISKS - \$20

+ FREE CATALOGUE DISK

● GAMES ● GRAPHICS
● UTILITIES
● TUTORIALS
IMMEDIATE DELIVERY

☐ PLEASE SEND 5 DISK OFFER
\$20 CHQ/M.O. ENCLOSED

Please tick your preference(s):

_____ Games _____ Computing
_____ Art _____ General

☐ PLEASE SEND FREE
CATALOGUE

Name: _____

Address: _____

PostCode: _____

Post To: **BRUNSWICK
PUBLICATIONS
PO BOX 458
BONDI JUNCTION NSW 2022**

**AMIGA
ANNUAL
1991**

Produced by the editorial staff of
Australian Commodore and Amiga
Review and Professional Amiga User

**On sale at newsagents
and computer dealers
NOW - \$6.95**

- ★ Complete up to date list of
software available in
Australia with description,
price, availability, etc
- ★ User Group List ★ Fish
Disk List ★ Graphics
- ★ Word processing ★ Hard
Drives ★ Communications
- ★ Music ★ And lots more !

**Commodore 64
EDUCATIONAL
SOFTWARE**

ORDER NOW FOR YOUR FREE
50,000 ENTRY WEBSTER
DICTIONARY

When you're through playing

- ☐ WHIZ KID - (QUIZ GAME)
10-ADULT
- ☐ MATH WHIZ - (AGES 6-10)
- ☐ TINY TOTS (AGES 2-6)
- ☐ WHIZ SPELLER (AGES 6-ADULT)
- ☐ FREE DISK CATALOGUE

TICK APPROPRIATE BOX/S
INCLUDE CHEQUE/M.O. FOR \$29.95
PER PACKAGE OR \$100 FOR ALL
AND POST TO ...

**MILLERSOFT
5 ARGO WAY, AIRDS
NSW 2560**

M V B COMPUTERS

&

Computa Magic

506 Dorset Road, Croydon 3136
Phone (03) 725-6255

Shop 5/30 Hall Street, Moonee Ponds 3039
Phone (03) 326-0133

(GVP) Great Valley Products

GVP SERIES II A2000 SCSI Hard Card + 8MB RAM Controller. (HC8/xx) (0K)

Series II A2000 HC8/52Mb Quantum \$1160 (New 1 inch high mechanism. 19ms access time)

Series II A2000 HC8/105Mb Quantum \$1360

Series II A2000 HC8/170Mb Quantum \$1750 (15ms access time)

Series II A2000 HC8/80Mb Seagate \$1215 (Deal of the year)

GVP SERIES II A500 HD+ (SCSI controller, 8Mb RAM Expansion, custom mini-slot, perfectly matching case)

Series II A500 HD8/40Mb Fujitsu \$999

Series II A500 HD8/52Mb Quantum \$1250

Series II A500 HD8/105Mb Quantum \$1649

NEW GVP ACCELERATORS

Suit A2000

*68030 22Mhz

*1Mb RAM

*32bit SCSI CONT.

\$ CALL

*68030 33Mhz

*4Mb RAM

32bit SCSI CONT

\$ CALL

All products are in stock

\$10 overnight shipping (Australia wide)

12 months warranty on all items

24 months on Quantum Hard Drives

Data Flyer SCSI Interface

Introducing the DataFlyer - offering great performance at a cost attractive price.

FEATURES

-AUTO-Booting

-AUTO-Install software for super easy formatting

-Non DMA design eliminates DMA problems - Supports Fast File System (FFS)

-Amax Compatible

-Auto-Diskchange for Syquest

-Mouse button defeats AutoBoot

**COMPATIBLE WITH ALL
MAJOR HARD DRIVES.**

DataFlyer A2000 45Mb Seagate \$795 23ms

DataFlyer A2000 40Mb Quantum \$895 19ms

BASE Board (0-6Mb RAM for the A500)+Clock

- Simple "Plug-in" installation
- Works with Fat and Fatter Agnus
- 4 Megabytes contiguous memory
- 6 Megabytes contiguous memory optional
- Memory may be installed in 1/2Mb increments
- Multi-Layer construction means it:
 - Has perfect data integrity
 - Works with any manufacturers DRAM
 - Works with any combination of DRAM speed (60ns-150ns)

BaseBoard 0Mb \$249 - 2Mb \$449 - 4Mb \$649

What they said...

If you want more than the essential 512K RAM upgrade for your A501 slot or if you need Super Agnus support, the Baseboard system is the way to go.

John Wolfskill
Amiga World
Senior Writer, Technology

NotePad NotePad NotePad

SpectraColor

Software company OXXI have released a new HAM paint package complete with brush animation capabilities. The package looks a lot like *Photon Paint*, but there are a host of new features. You can easily create a curved path for animations, or alter the shape of a brush during the animation. *SpectraColor* tweens, morphs and animates - the only HAM animation package in its class according to OXXI - do they know about *Deluxe Paint IV*?

The program will sell in Australia for under \$150. For more info call Computermate on (02) 457 8388.

1930 Monitor

Now available here for \$649, this Commodore monitor is VGA, not multi-scan (whereas the 1950 is multi-scan).

A multiscan monitor can do all that a VGA monitor can do, but can also do lower resolutions, somewhat useful on a machine like the Amiga with its many possible display modes (if you're going to use them), and the possibility of programming the chip which handles display.

Deluxe Paint IV

Still more improvements have been made to the paint program other paint programs are measured by. Electronic Arts have finally integrated some of the features previously bestowed upon the boring old MS-DOS version. You can now ex-

pect some much slicker graduated fills and anti-aliasing. There's also support for HAM and productivity modes, along with a special light-box feature for creating hand drawn cartoon animations similar to Disney's *Animation Studio*.

The whole look and feel of the program has been brought in line with *Workbench 2.0*, and there's better control over animations. Expect to see a release around the middle of this year.

Schools offered Amiga package deals

In another bid to acquire a bigger slice of the educational market, Commodore are offering a range of packages to schools at extraordinarily good prices.

Including monitor - you can get:

- Amiga Deluxe Pack for \$1290
- A2000 Pro Pack for \$1820
- A3000 Performance Pack for \$465
- PC AT Pack for \$1790
- PC 386 Pack for \$2580

Assorted programs are thrown in to help sweeten the whole deal and kick off the new owners with some immediate useful applications. Let's hope they sell thousands!

Touch tablet

Local software company Serendipity Software have launched a complete Amiga touch-tablet package combining the Calcomp Wiz and

necessary drivers for use with a range of software package.

Once in place, the software allows most mouse-driven programs to use the touch-tablet as an input device.

For more information contact Peter Skarpetis on 02 449 8133 ext. 283.

Japanese on Videodisk

Temple Industries in W.A. is authoring the code necessary to set up courses for learning Japanese on videodisks, controlled by Amigas. The curriculum is being developed mainly at Curtin University. Three or four more such disks will be developed in the future.

Anthony Temple, the mover and shaker in this venture, also sees a possible CDTV spin-off in the future. If Commodore is smart, they will jump into marketing the product with such things as an Asian keyboard sets and the like.

Graphic Designer

New Horizons Software have issued a challenge to Professional Draw - the structured drawing program. Graphic Designer offers smoothable curves, multiple drawing layers, and flexible text handling and unlimited multicolour patterns. It contains an ARexx port with complete macro language. You can get full control over printing, reduction, enlargement, sideways printing, and print density. You can even get drawings of over 64 square feet.

Only 512K required, and price is US\$125. The product should be available at the end of May.

ProVector 2.0

Another graphics package with similar features; this one features multiple

level "undo", "layers" system, and text flowing on any path. Compatible with WB2.0, and has the ability to save files in ProVector (IFF-DR2D), IFF-ILBM, HP-GL or Postscript formats, and a dithering routine to simulate 256 onscreen colours. ARexx-compatible.

Price is US\$ 299.95 - from: Taliesin, Inc., 1327 Corte De Los Vecinos, Walnut Creek, CA 94598, USA. Tel: (415) 2561195.

Newsflash disk magazine

A disk magazine with a difference. Newsflash is now available. As well as regular editorials, it has programs, utilities, creative art, music, demos, and other notices. It also includes a world wide message bank, a special service for readers. Quadrant Computers (09) 375 1933. (Dealer and retail enquiries welcome.)

Pagestream qwikforms

The Sterling Connection, who also have a bunch of spreadsheet templates for home and small business called Templicity, have created over 100 adjustable layouts for PageStream, including invoices, inventory control, order forms, purchase orders, job estimates, legal forms, etc. For more information call Computermate on (02) 457 8388.

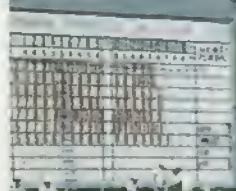
PowerPacker Professional

You can't pump up a disk, but with PowerPacker you can compress its contents into less than two-thirds the space otherwise required for storage - on floppy or hard drive.

PowerPacker uses sophisticated crunching algorithms to reduce the size of files, allowing about 40% more material to be stored.

Continued on p10

PGA TOUR GOLF



The pressures of a PGA TOUR Pro

- Play on authentic Tournament Players Club courses.
- Compete against 60 PGA TOUR Pros in four round tournament play.
- Track your own stats in real PGA TOUR categories.
- Fight to finish in the money.

AMIGA®


ELECTRONIC ARTS®
By Sterling Silver Software

Distributed by:
Electronic Arts Pty Ltd
Unit 4/52 Lawrence Drive
Nerang 4211 Queensland
Telephone (075) 96 3488

RRP \$39.95. For more information Quadrant Computers (09) 375 1933. (Dealer and retail enquiries welcome.)

Amiga stargazing

An astronomer called Mighell from the Netherlands developed an Amiga-VAX corroborative software/display setup for counting stars. The Amiga links to the VAX as a low-cost display of the serious number-crunching done by the VAX. Mighell chose the Amiga over the competition for its graphics and multi-tasking. Oddly enough, I found this report in "PC User" magazine, a publication which ignores Amigas as much as possible!

Xcopy mystery unravelled

There has been some confusion about this program - there was a PD disk called XCopy on some PD catalogues with a letter which described how a programmer had been "ripped off" by Cachet Software (the authors of Xcopy3).

The programmer said he had written a new version and Cachet had refused to pay him, so he was releasing it into the PD. In the words of Martyn Brown of 17-Bit Software in the UK:

"After talking to the director of Cachet Software (who also happens to be the author of Xcopy) I can clear up the situation.

"The version of Xcopy in question (2.3) is an illegal and unofficial version that

has had features added, commonly called a "hack". Cachet Software did not ask for this work to be carried out - it appears that the programmer in question added the features and sent it to Cachet, who rejected the "new" version. In which case the programmer has no case.

"The latest official version of Xcopy is Xcopy3 Professional, including all sorts of correct, working features and is the only one recommended by Cachet. Cachet assume no responsibility for misuse when using 2.3 and have said that use of some of the added features can actually harm the disk drive.

"So the disk has been removed from some PD lists, and we urge all PD distributors to do likewise."

Controller for 2.5" and 3.5" hard drives

Released by ICD, Inc., it is called AdIDE, and is an autobooting IDE (Intel-igent Drive Electronics) hard drive controller. Fits into any Amiga under Kickstart 1.2 or higher. Also compatible with other devices on the external expansion port and lets you boot from external floppies when required. Said to be the smallest host adapter for the Amiga.

Price US\$159.95 - info from: ICD, Inc., 1220 Rock Street, Rockford, IL 61101, USA. Tel: (815) 9682228 - or try Maxdrive Systems on 008 076 301.

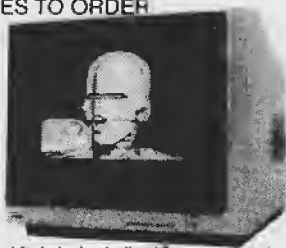
HI-TEK MONITOR FILTER

COMMODORE 1081; 1084; PHILIPS 8833; 8854;
ALL OTHER TYPES TO ORDER

Our high quality filters are made from optical quality 3mm Acrylic specially tinted. It's unique filtering qualities have been extensively tested and approved by Amiga user groups, doctors and government offices.

\$39.95 inc P & P

- TOTALLY ELIMINATES MONITOR GLARE.
- RESOLVES LONG EXPOSURE ADVERSE EFFECTS.
- PROTECTS FROM R.S.I. EYE STRAIN.
- ENHANCES ON SCREEN COLOURS.
- INCREASES IMAGE SHARPNESS.
- MAKES INTERLACE MODE VIABLE.



Made in Australia 10 year guarantee

HARRIS HI-TEK PTY. LTD.

19 Maloney St, Blacktown, NSW 2148
Tel: (02) 671 1856

MONITOR TYPE

PAYMENT: PLEASE INDICATE METHOD ☒ PLEASE DEBIT MY CREDIT CARD
VISA - MASTERCARD - BANKCARD

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

☐ CHEQUE - P.O.

EXPIRY DATE

MR/MS/MRS

SURNAME

INITIALS

SIGNATURE

ADDRESS

POST CODE

ATonce

The Ultimate IBM-AT-Emulator
for the Amiga 500
AT a price you can afford

\$549

80286 processor

704K + 8M Extended/Expanded memory

6 times faster than XT Bridgeboard

Boot from any hard drive

Support all Amiga hardware

Multitasking

Copy from DOS to DOS with supplied utility

Norton SI 6.1

VGA-EGA-CGA Graphics

Adaptor for A2000 available soon

Dealers required

Fonhof Computer Supplies

64 Cross Street, Baulkham Hills NSW 2153

Phone (02) 639 7718 Fax (02) 639 5995

The colourful world of

MathsVISION

by George Kimpton

Take a bunch of numbers, plot them, colour them and view them from anywhere you like and you have the principle behind *MathsVISION*. Trigonometry, boolean algebra and recursive formulas never looked so good.

I am sure there are times when, like me, you have found mathematics either plain boring or frustratingly incomprehensible. Then along came Mandelbrots and Fractals. Still incomprehensible, but fascinating pictures. Instead of seeing masses of boring numbers we see magnificent swirls of colour patterns which represent ranges of numbers.

The experts tell us these are all part of the Chaos Theory of Mathematics where seemingly random happenings are in fact mathematically predictable. This branch of mathematics is regularly being used to create scenery using products such as *VISTA*. The resulting IFFs can be used as backgrounds in paint programs, or as textures in ray-tracing or animation packages.

People are even proving that normal objects such as a flower or leaves can be described mathematically and can consequently be drawn by a computer. *MathsVISION* actually provides the formula to plot a flower. In other words I think they are trying to tell us that everything in nature can be described mathematically. (Apart from *Commodore Review* contributors - Ed.)

Applications

Some game programs in fact do use fractals for scenery and even

create individual trees, plants, rocks, etc. to provide the right background. The artists among us now can also easily use programs like *VISTA* to render mountains, rivers, clouds and all those things necessary for good backgrounds in art work without the usual hard work.

The only problem is that we don't really understand what we are doing and how to get exactly what effect we want. Well, with *MathsVISION*, we can get a little closer by introducing our own math formulae into the program and then controlling just how it will be displayed.

We can either have the simple X,Y plots we are all used to or colourful contour or perspective plots. Thus we are capable of evaluating functions with one or two variables by displaying the results of our formula on screen in full colour and in 3-D if necessary.

Requirements

MathsVISION system requirements are fairly basic; 512k of RAM (more is faster), one disk drive, although two are better, and Workbench 1.2 or higher. Provision is made for hard disk installation and different versions of the program are supplied for an accelerator board.

AREXX is also supported and covered in a special section and tutorial.

In the author's own words: "*MathsVISION* is a tool for viewing mathematics. Its pictures are pictorial representations of mathematical expressions and data. It provides many different techniques to visualise any mathematical expressions and data." It also seeks to stimulate new insights into the behavior of the phenomena being studied.

It allows the use of colour cycle art and provides the ability to animate functions and to explore Chaotic Functions such as the Mandelbrot set, Cantor set, Lorenz equation and bifurcating formulas all in full colour.

Wow, what a mouthful, but it sounds fascinating doesn't it?

MathsVISION has a sophisticated graphics interface which allows you to choose definitive limits over which a function is to be evaluated without entering specific data. It also allows you to choose the form of display to give the best visual understanding of the resulting data. It then allows you to analyse that data easily with a zoom facility and cursor readouts on screen.

The basic X,Y or simple plots are for single variables. When we use the contour or perspective plots we are really moving into the multiple variable fields. Each contour is displayed as a different colour. Contour colour and width is selectable through something called a "Modulo".

The Function itself is entered as "Val" in the Edit screen. The Variables, from FA to Fn, which control the function are also entered via the Edit Screen. The other parameters and plot controls are through pull down menus.

The results of the Contour and Perspective Modes are displayed as colour contour patterns on your screen with some staggeringly beautiful patterns if the formula and the functions it uses are right. However even with the most mundane formula there can still be some beautiful results. The results can be saved to disk or printed out.

Practicality

Yes, you say, but how does this help me with working out my investments or that rather complicated project that's driving me mad at present? Well, in any of the display formats you can use the Analyse Cursor which allows you to move around the screen or graph and automatically read out the resulting parameter values that correspond to the cursor position.

Tutorials take you step by step through the working of very simple formulae concerning electrical power or the calculation of sales tax on an item for sale. This is handled as a single variable in the simple format and in a two variable format as a contour display where you can move your cursor around and find the resultant of varying either price or sales tax.

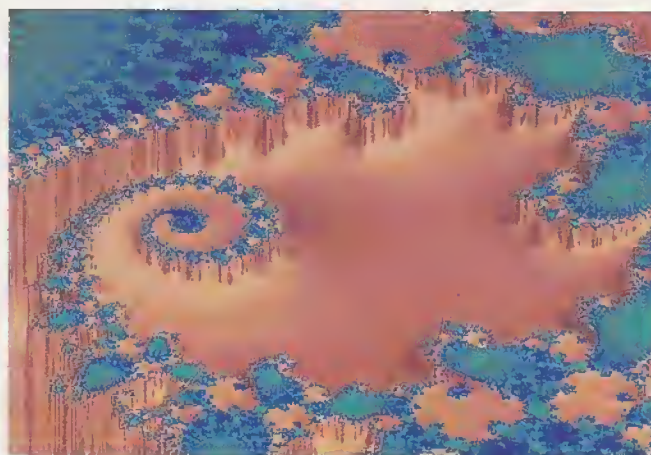
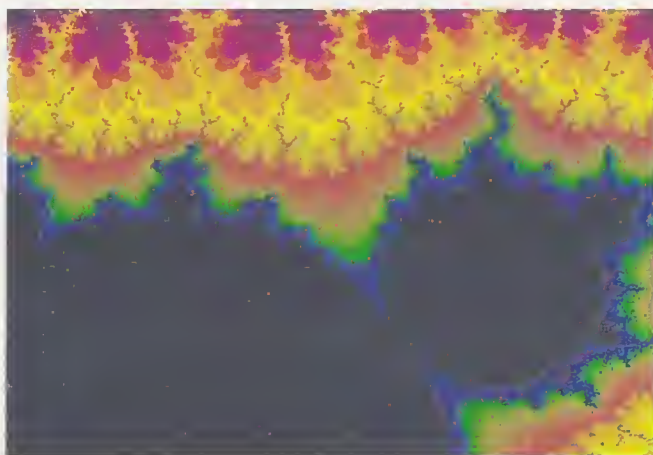
There is even a tutorial which shows you how to determine the optimum investment and way to invest your hard earned savings to achieve

Distributed by:

ComputerMate
02 457 8388

RRP:

Amiga \$289.00



a stated goal. Just what we need while every cent counts these days.

Considerable care is given in this tutorial to teaching you how to organise the data of your problem to minimise taxes and optimise capital gain and then devise a formula that will give you the information you need. A scan of the resultant graph in the Analyse mode allows you to optimise your investment.

Problems

Quite complex formulae or functions are possible using the edit screen but you must learn to use MathsVISION's own peculiar format and rules to enter your calculation or function and variables or watch out.

One thing that is very frustrating with this program is that there are times when you do not know if the computer is working or not, and if it is not working, did you do something wrong. It sometimes just sits there and smirks at you with nothing ap-

parently happening and you are none the wiser.

All is pretty straightforward up to this point but beyond this the manual tends to fall down. For a practising mathematician the remaining pages may be easy to follow but for me it often left just too much out. Maybe if I did not have a deadline to meet in writing this article I could have eventually fumbled my way through in a month or so.

This program is definitely not for the casual mathematician unless you stick to basic calculations, it is for the professional or someone who likes a challenge or collects programs of this type. If you like to produce pretty pictures using mathematics and are prepared to persevere you will probably win through.

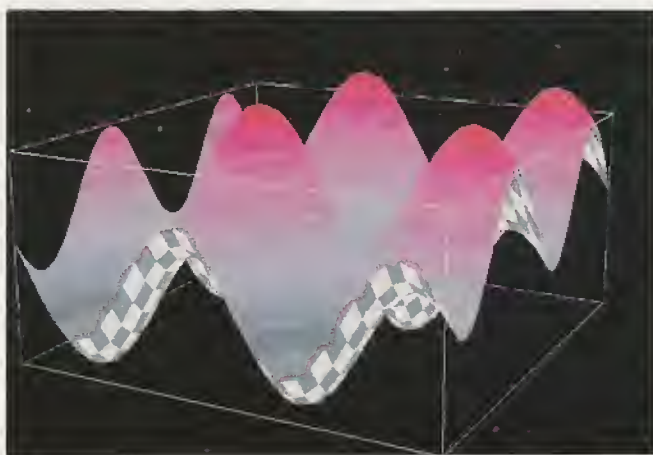
What this program badly needs is a completely rewritten manual or a new supplement. I feel sure it has tremendous potential as the preplotted screens show. One screen actually shows how you can mathematically

draw a Spleenwort Fern frond and even supplies the formula to do so.

Other preplotted screens show a magnificent Mandelbrot and some other plots with very interesting shapes and colour patterns. Formulae and functions are again supplied to allow you to experiment with them. There is even a means of producing mathematical sounds if you should so wish.

This is where it all comes apart though - try as I might I could not bring up a resultant screen plot of the fern. After clicking on Plot I was faced with a black screen with the usual snooze balloon showing that the computer was busy for some time. Finally the snooze disappeared and the pointer came back but no fern. I flipped screens but it was nowhere to be found.

What the manual does not explain very well is the fact that you need to have some specific "Hooks" up and running to make these things happen and it doesn't say what happens with



RapiSoft

the wrong ones running.

Hooks are specialist sub programs for specific data manipulation purposes. This is discovered through diligent re-reading of the manual but it still doesn't tell you which ones are needed or the procedure to load them after you have started *MathsVISION* running. The old hand remembers the (Amiga-N or M) method but a new chum might not.

Other things can also cause a lack of display. Determination to make the program work and a number of blank screens finally led me to experiment with scaling and magnification factors - and Bingo!, a display at long last on some hitherto unseen plots.

There was also a mysterious "Z" which appeared when I tried to adjust the angle of view in perspective mode with some formulae. This was apparently telling me to zoom in if I wanted to see anything at all but not a word in the manual.

The manual also tells you to browse through the examples on the Pictures disk. Something was missing again - for clicking on icons from Workbench did not produce any results when I tried even with the program running.

However it was possible to view some of these preplotted pics when running the program, through the load requestor. These were enough to whet the appetite to press on and do my own thing with my own formula. Unfortunately the results were somewhat disappointing. Perhaps with more time I will have better luck.

Conclusions

I believe this program has much to offer if one could only get into it but it needs a better manual, one the ordinary person can follow, otherwise, in its present format, it will appeal only to the mathematicians or those who like a challenge. It will of course still help and satisfy those who are satisfied with fairly basic maths analysis and manipulation.

For those who are prepared to persevere I suspect the rewards will be great with some fascinatingly beautiful screens, such as the Julia Mandlebrot demo, once one learns to master the dreaded "Hooks". These hooks seem to have some mysterious protocol whereby loading the wrong one cancels others out.

Unfortunately, it is by no means clear from the manual which does what and which are absolutely necessary for specific projects. In fact there is practically nothing said about the demos except for some cryptic remarks on the Edit Screen when the appropriate formula is loaded.

The Amiga may be user friendly but this program, or maybe it's just the manual, is not. Well, good luck with *MathsVISION* if you should decide to take a chance with it and if you succeed drop us a line and let us know what you found. ☐

The Ultimate Games Pack

40 GAMES ONLY \$27

Introducing the Public Domain offer of the year! This fantastic package of Amiga software contains eight disks full of the latest Amiga Public Domain games! Everything from action, strategy and adventure games to role playing and trivia games. All you'll ever need!

Enjoy hundreds of hours of game playing for just 68 cents per game! If you were buying 40 commercial games, you would expect to pay around \$2000!

All games come with documentation and are easily loaded from the Workbench or CLI; ideal for any Amiga user - novice or experienced. All software has been extensively tested for viruses.

Contents of the pack:

Action Games: Air Ace II, China Challenge, Destination: Moonbase, Downhill challenge (Skiing), DriveWars, Humartia, MirrorWars, Missile Command, Rings of Zon, Running, Sealance, Space Wars, Sys, Tron.

Strategy Games: Blackjack, Conquest, Headgames, Imperium Romanum, Logic, Miga Mind, Monopoly, Obsess-o-Matic, Puzz, Rubik Cube Solver, Seahaven, Steinschlag, Tetris, The Brain, Triangle, Triple Yacht-Z, Train, Trippin, Up&Down, Welltrix, Yawn!

Quiz Games: Hollywood, Quiz (Bible, States, Physics & other quizzes).

Role-playing Games: Mechfight, Metro.

BONUS: Cheatsheet: Cheats, hints, passwords & solutions to hundreds of commercial games!

Nearly all the games from the last 100 Fish Disks are contained in the pack!

Rapisoft's P.D. Library now consists of:

Amicus, Amigan and Fish Disks (up to 470), GIF Picture disks and demo disks. All only \$4 each!

Send now for your two-disk catalogue!

Please send me the following:

- ☐ ___ copies of the Rapisoft Catalogue Disks @ \$5 each
☐ ___ copies of the Ultimate Games Pack @ \$27 each

I enclose Cheque/Money Order for \$ _____

OR Charge my: ☐ Bankcard ☐ Visa ☐ MasterCard

Card No: _____

Exp Date: _____ Signature: _____

Name: _____

Address: _____

Suburb: _____ Postcode: _____

✉ Mail to: Rapisoft, P.O. Box 19, Forest Hill 3131

HyperBOOK

More powerful than a CanDo. Able to leap tall applications from a single hot point. Faster than a speeding AmigaVision. Look! In the drawer, it's a book, it's interactive, it's Hyperbook!

Andrew Farrell
crammed into a phone booth to file this hyper report.

Yes folks, here at the synapse snapping edge of time, Gold Disk are breaking new ground, releasing products they haven't advertised for six months, haven't taken hundreds of orders on already, and that do work without any hidden bugs. However, *Hyperbook* is not a new concept. Why, it's been hyped up before with products like *CanDo*, *AmigaVision* and even the likes of *UltraCard*. And of course, in the Apple Mac World with products such as the original *Hypercard* and *Supercard*.

Hyper software lets you jump around, madly flipping from one unrelated fact to a picture to another fact to a different bit of information and then back again. It's around the ency-

clopedia in eighty clicks of your rodent.

Hyperbook is all this and more. But seriously, from stand alone applications to interactive hyperbook presentations, *Hyperbook* offers a smart interface and reasonable power to make it all possible.

Imagine a *Hyperbook* World Atlas. Looking at a map of the world you click on a country of interest. Next up you're viewing the states of that country, you choose one and click. This time you're presented with a picture of the capital, charts on the population and other key facts and a graphic showing the population growth over the past ten years. You click on the graphic and you get to listen to a speech by the prime minister given at the most recent meeting of government.

This is hypermedia. The same program could design applications, running stand alone on your Amiga without the main *Hyperbook* program. We're talking phone books, appointment managers, educational software, games ... you name it. *Hyperbook* is not everything *CanDo* is, but what *Hyperbook* can do, it does with style, ease and elegance.

Installation

Inside your hyperbox there's two disks contained in the usual "if you break this seal and live packet we will have to kill you", with all the relevant license details that go along with that.

There's also a handy guide to applications area. This was the first book I read. It really threw some light

onto the potential of this package. The 148 perfect-bound user manual has a cluttered look, but is nevertheless filled with useful examples and plenty of explanations.

Installing the product is as simple as every Amiga program should be - drag the icon to the drawer you wish to contain the application. It will help immensely if you also have a copy of AREXX on your system - AREXX arrives standard with Workbench 2.0 or you can buy it as a commercial product.

For those unsure, AREXX provides the interface required to allow programs with an AREXX port to communicate with each other. AREXX has a programming language of its own, and each application running with AREXX adds its own commands. In essence this means you could tell *Digiview GOLD* to grab a picture from a spreadsheet program. These sorts of capabilities allow amazing hybrid applications to be developed. The limits of one program can be filled in with the power of another.

With this in mind, and the fact *Hyperbook* boasts a very large AREXX command set, and you begin to see the power of this program stretches well beyond the interface we're about to take a look at.

Inside the Hype

When you first launch *Hyperbook* the screen opens with a large blank expanse waiting to be hyped up with books. To the right is a bunch of tools for constructing the hype and there is an array of pull down menus. The interface looks Workbench 2-ish and has a slick, smart feel. Everything happens quickly and smoothly.



Editing a "Hotpoint"

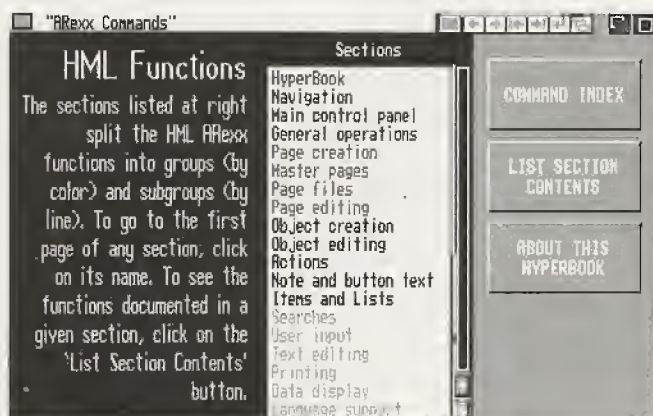
Distributed by:

Dataflow
02 331 6153

RRP:

Amiga \$139.95





Arexx manual

It's best to start by having a look at one of the example books included on the second disk. If you have AREXX, (*Hyperbook* will run AREXX for you if it's there), you can also try out the applications. These books are more complex and include functions which modify the book, work with files and data.

A quick guide around the menus must begin with the standard Project menu: from here you can LOAD and SAVE a book or defaults, print pages, iconify or shrink the window down to a tag on Workbench or empty the BIN - which is kind of like clipboard, but different. The programs file requestor is F.A.B. (Farrell Approved Build). All available devices are listed, and the option to sort the list is included. It is fast and easy to use.

On the page menu you can create, delete, edit, load, save and merge pages - or screens in real terms. Many pages, or just a few depending on the requirements, make up a book. In this case, because you jump around

the pages, it's a hyper book!

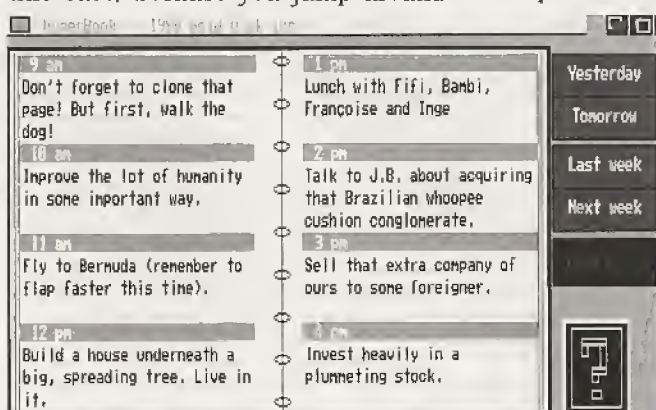
There's a host of options on the Command menu for dealing with text, objects and pages. You can read and edit text, display a picture or delete a file. For fast development of hyped up books you can also run your favourite wordprocessor or paint program directly from *Hyperbook*. From the Preferences menu, dozens of default program settings can be altered.

The last menu handles the AREXX interface. You can create, save, load and edit macros or issue a single command. AREXX macros can be attached to parts of a *Hyperbook* application.

AREXX provides the interface required to allow programs with an AREXX port to communicate with each other

Tools and Gadgets

Although defaulting to the standard right hand screen position, *Hyperbook's* tool bar may be positioned wherever you wish just by grabbing the top bar and moving it around.



Diary application

Any standard IFF file can be imported. *Hyperbook* keeps an original copy in memory, whilst allowing a portion or the entire original to be scaled and placed on the page. Later on you can easily crop, move and size the image. Text can be placed in a similar fashion, with excellent control over fonts, formatting, point sizes and styles. *Hyperbook* receives top marks in this area.

All types of boxes containing any kind of element may be turned into a hot point. When you click on one of these defined boxes, *Hyperbook* can be instructed what to do. Using the standard requestors you can trigger one event. With help from AREXX you can trigger several. Normally you will want to jump to another page, however other possible actions include: Show Picture; Display Text; Go to page; Show/Hide; DOS Command or AREXX Command.

With all these options up your hyper sleeve the world of hyper media opens up along with the possibility of including a host of effects such as music and sound not directly supported within *Hyperbook*.

A small selection of drawing tools enable simple diagrams and graphics to be created within *Hyperbook*. The graphic elements are handled in the same fashion as a structured drawing program, meaning you can easily modify the image later.

Conclusions

Hyperbook is brilliantly designed. It is simple to use, works quickly and intuitively. I would recommend it for developers of graphic intensive education products, teachers, and professionals for presentation work. With the right graphics, text and sound, *Hyperbook* has incredible potential. Well done Gold Disk.

Let's see some local applications for this package real soon now. Much of the potential of *Hyperbook* lies in the uses to which it is put. □

Tool functions include: Read the *Hyperbook*; Edit; Bin; Group; First/Last/Next/Previous page; Contents; Return to page; Create Note; Drawing or List; Create Button; Picture or Page.

Creating a page is simple. Choose create page and then fill it with all the information you want on it - pic-

Cameron Handy Scanner

by Stuart Kennedy

Just when you thought it was safe to close up your wallet there is a new must-have peripheral in town - the scanner. This image and text sucking widget is fast becoming the darling tool of desktop publishers, CAD jockeys and database maintainers.

Scanning is also great fun, especially for playing video voodoo with friends, enemies or on yourself. Feeling vindictive? Just scan in a picture of that ex girl/boyfriend or pesky relative and video hack their anatomy into amusing shapes.

In the US, the market for scanners more than doubled last year and the giant PC compatible market has become very well served with devices ranging from simple, low resolution, black and white scanners costing several hundred dollars up to US\$15,000 systems able to scan and decipher the Dead Sea Scrolls.

While scanners are being thrown at IBM compatible users, scanner offerings have been thin on the ground in Amiga land. The reason is that while a few scanners transmit data over the universal serial or parallel ports, most use either a SCSI interface or the GPIB/IEEE-488 bus. For a manufacturer wanting to sell an Amiga product compatible with the large Amiga 500 market this means having to do a software port and designing a special interface.

Fortunately Germans like the Amiga and have bought it in large enough numbers to entice German scanner manufacturer Cameron GmbH into producing a range of machines which will work with the 500 and the 2000+ series. Models range from a simple 200 DPI black and white model to a colour unit able to scan in 4,096 colours.

I tested the Cameron Type 10 hand held scanner which has switchable 200/300/400 DPI resolution, a large 105 mm scan width (most hand held scanners have a 64 mm scan head) and is capable of producing 16 grey tones as well as black and white.

The unit comes with two interface cards: one for a 2000+ Amiga which fits into a vacant 2000 slot and an Amiga 500 interface which hooks on to the expansion connector on the lefthand side of the computer. The scanner has a long 1.7 metre

cable which attaches to either interface with a DB9 plug.

The scanner is palm sized with a green plastic window mounted in the head which lets the user see through to the material being scanned. The window also defines the maximum scan width of 105 mm. On the left is a three position switch which selects a resolution of either 200, 300 or 400 dots per inch. On top of the unit is a large oblong button which turns scanning on. A red LED mounted inside the scan head lights to

tell the user that scanning is in progress. There is a contrast wheel on the right and a four position switch which selects between black/white or three levels of grey scale dithering.

So how does it work? The quickest way to move an image from the desktop onto the screen is to run the supplied demo program. Find a picture, hit the big grey button, and drag the scan head over it. Bingo. A black and white rendered image appears and a whole new world of plagiarism opens up.

The first surprise for a scanning novice is that the screen image is much larger than the scanned picture. Increasing the DPI makes the image even larger. It's all a matter of screen resolution and dots per inch. Resolution of a scanner is determined by the number of dots the device can sample per linear inch of document. Image symmetry and clarity is best with the screen in 640 x 400 interlace mode.

Handy Painter

Cameron supplies a scanning cum picture editing program called *Handy Painter*. The first time I ran *Handy Painter* off the master disk the menus came up in German - the program can be installed in a number of languages including English.

The paint program has a full suite of editing tools for zooming, cutting, pasting and filling parts of a scanned image as well as an array of drawing tools like lines, boxes and circles. The program uses all available ram (chip and fast) for its picture buffers so very large images can be manipulated. The downside is speed. When running a four bitplane, 640 x 400 interlace screen the software grinds along very slowly.

A one megabyte machine is marginal for running high resolution screens and scans. I was booted out of the program many times with out of memory errors - fortunately the program can save work in progress if the memory mark is overstepped. Beside running out of RAM, I also found the program to be rickety in the reliability stakes. It would often hang or guru inexplicably. Once a scan was on the screen the best part of using *Handy Painter* was leaving it for something easier to use and more robust like *Dpaint III*.

Black and white mode on the type 10 was excellent for snaffling up simple line drawings and can be used to build an impressive clip art library. But the most stunning results came by using the dithering and grey scale rendering ability of the scanner and the paint program.

Photographs are continuous tone images meaning they are made up of an infinite number of grey shades between black and white. The Cameron Type 10 scanner can differentiate 16 levels of grey through dithering (changing dot densities to simulate shades of grey). The software is capable of rendering the dithering into "real" grey scales by using a 4 bitplane, 16 colour screen. (This is not good enough for professional use which requires 256 grey scales - Ed.)

Processing a scanned image into greys takes time and reduces resolution (and picture size) by a factor of four. It also uses a lot of memory. On a one meg machine the maximum sized image able to be scanned and processed into greys is around 55 mm by 55 mm. The software allows the user to specify the limits of a scan and will automatically set the maximum allowable dimensions for available memory.

All this means that the Cameron Type 10 can scan a black and white or colour



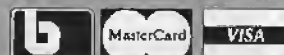
Continued on p18

BRIWALL

AUSTRALIA

BUSINESS HOURS
Mon to Friday
9AM to 4.30PM

Phone: (06) 288 0131
Fax: (06) 288 0337
24 HOUR SERVICE



PO BOX 9
RIVETT ACT 2611

C64 / 128

SUPERBASE/SUPERSCRIPT PACK

The ultimate in data base and wordprocessors for the 64/128 computers. This package includes Superscript, Superbase and Superbase-The Book. These programs are by far the most powerful available for the C64/128 computers and are suitable for small to medium businesses, as well as for the home, clubs, schools etc. Both packages include Superbase V.3, which on the 128 supports the 1581 disk drive.

Great value at . . .

Superbase/Superscript Pack

64 or 128 \$130

WHY CHOOSE BRIWALL?

**WE'RE
MAILORDER
SPECIALISTS!**

**SATISFACTION
GUARANTEED!**

**NEW LOOK!
EXPANDED RANGE
LOWER PRICES**

PRICE MATCH
Any software advertised
in this magazine
WE WILL MATCH!!!
(Except Specials)



Free gift voucher with every order
Send now for our all new low price catalogues!

AMIGA

Doctor Ami..

Doctor Ami.. is a memory and hard drive diagnostic program that performs sophisticated, low level tests on your Amiga system. It uses a full intuition interface with simple, clear controls and displays.

The program scans the system for all memory - including on board; expansion and accelerator memory. Tests regions and displays error list of bad memory locations and generates an error file.

Allows user to patch any file on the hard drive using the bad sector. Sectors with errors are removed from the black availability map so that they will not be accessed. Can also be used to format damaged floppies; examine any mounted drive device etc etc. A MUST for all Amiga owners.

NOW ONLY \$49

Listed below is a sampling of our great range of products at excellent prices. We currently have over 1000 Amiga products (growing daily) and a great range of 64/128 products (over 400) to cater for your every requirement. We also stock a large range of utilities and books, and we guarantee all our products. Drop us a line, or phone or fax us for our free catalogues which include latest games and educational programs!

64/128

UTILITIES

1750 RAM EXPANDER	399
1541/1571 DRIVE ALIGNMENT	44
1581 TOOLKIT V2	60
ASSEMBLER/MONITOR/64	60
BASIC 8	48
BASIC 8 TOOLKIT	29
BASIC COMPILER 128	90
BASIC COMPILER 64	90
BIG BLUE READER 64/128 V3.1	65
CP/M KIT	55
COBOL 128	58
COBOL 64	66
SUPER 81 UTILITIES	35
MAVERICK COPIER V5	50
DIGITALKIT 128	39
SUPER SNAPSHOT 5 W/C128 DIS	110
SUPER SNAPSHOT V5	93
SYSRES ENHANCED	25

BOOKS

500 C128 Q & ANSWERS	40
SUPERBASE - THE BOOK 64/128	40
TWIN CITIES 128 COMPENDIUM I	40

ACCESSORIES

APROSPAN 4 slot cartridge holder	49
FREEZE MACHINE	58
SUPER GRAPHIX INTERFACE JNR.	89
VIDEO RAM 64K CART. FULL	90

CREATIVITY

ANIMATION STATION	129
HOLIDAYS & SEASONS	39
HOME DESIGNER 128	49
HOME DESIGNER/Circuit Symbol Lib.	19
NEWSMAKER 128	43
SPECTRUM 128	49
I PAINT	59

ENTERTAINMENT: CALL FOR PRICES
ALL TOP TITLES AT ROCK BOTTOM PRICES

GEOS

BECKER BASIC FOR GEOS 64	72
GEOS 64 VERSION 2	59
GEOS/PROGRAMMER 64 / 128	39
GEOCALC 128	49
FONTPAK INTERNATIONAL	39
GEOCHART 64/128	39
GEOFILE 128	49
GEOFILE 64	39
GEOPUBLISH 64/128	49
GEOS 128 V2	69
GEODEX	64
WORD PUBLISHER 64/128	60

GENERAL PRODUCTIVITY

POCKET FILER 2	65
POCKET PLANNER 2	65
POCKET SUPERPACK 2.	145
POCKET WRITER 3 (64 OR 128)	89
SECURITY ANALYST 128	39
SUPERBASE 128 - V3	59
SUPERBASE 64	59
SUPERBASE/Superscript 128 Pak	130
SUPERBASE/Superscript 64 Pak	EACH
SUPERSCRIPT 128	59
SUPERSCRIPT C64	59
TECHNICAL ANALYSIS System 128	65
TECHNICAL ANALYSIS SYSTEM 64	55
BANK STREET WRITER	89
DATA MANAGER	40
SWIFT CALC 64	35
WRITE STUFF 64	40
WRITE STUFF 64 W/TALK	49
WRITE STUFF 64 C128 VERSION	49
CMS ACCOUNTING 64 OR 128	260

STOCK CLEARANCE SPECIALS

HURRY!!!

**THESE ITEMS ONLY AVAILABLE
UNTIL CURRENT STOCKS LAST**

AMIGA

DIGIVIEW GOLD V 4	239
PROFESSIONAL PAGE	199
PEN PAL	175
PAGE STREAM V 2.1	349
WORD PERFECT V 4.1	319
DATA RETRIEVE (not prof)	85
TIGER CUB	99
DR T MODEL A MIDI	95

C64/128

BASIC COMPILER 128	79
CMS ACCOUNTING	199
SUPER C 128	75
SUPER PASCAL 128	75
TEENAGE MUTANT TURTLES	35
64/128	35
BUSINESS FORM SHOP	29
64/128	29
C128 TIPS & TRICKS BK	39

AMIGA

BOOKS

AMIGA C ADVANCED FROG	45
AMIGA DOS INS & OUT	40
AMIGA GRAPHICS INS & OUT	45
AMIGA MACHINE LANGUAGE	40
AMIGA PRINTERS INS & OUT	55
AMIGA SYSTEM PROG GUIDE	45
BEST OF AMIGA TIPS/TRICKS	45
KIDS & THE AMIGA	30
PROG GDE TO AMIGA (SYBEX)	45

GENERAL BUSINESS

CITY DESK V2.0	149
EASY LEDGERS	369
EXCELLENCE	249
MAXIPLAN	59
NAG PLUS VGOLD	109
PEN PAL	175
P.H.A.S.A.R V4	93
SUPERBASE PERSONAL 2	115
S/BASE PRO V4 (NEW)	589
WORKS PLATINUM	185

EDUCATIONAL

BIBLE READER KJV	65
BIBLE READER NEW INT VER	85
LINKWORD EACH	43
MAVIS BEACONTYPING	65
SPELL-A-FARI	59
WHERE IS CARMEN SD EACH	65
YOUR FAMILY TREE V3	85

ENTERTAINMENT

BACK TO THE FUTURE 3	65
CAR WUP	56
DEATH KNIGHTS OF KRYNN	69
EXTERMINATOR	65
FEUDAL LORDS	65
FISTS OF FURY II	62
GODS	62
HARD DRIVEN II	62

HORROR ZOMBIES	62
ISHIDO	62
LES SUIT LARRY TRIPLEPAK	109
MONDAY NIGHT FOOTBALL	79
M.U.D.S.	62
NARCO POLICE	62
NAVY S.E.A.L.S.	62
PANZER KICK BOXING	62
PENTHOUSE JIGSAW (R RATED)	48
PRO TENNIS TOUR II	62
QUEST FOR GLORY II	79
RAILROAD TYCOON	79
THE POWER	62
WARLORDS	65

CREATIVITY/GRAPHICS

3D PROFESSIONAL	349
COMIC SETTER	89
DIGI PAINT 3	115
DRAW 4D	329
PRINTMASTER PLUS	55
TURBO SILVER	169

UTILITIES/LANGUAGES

64 EMULATOR 2 A500/2000	99
64 EMULATOR 2 A1000	99
AMI KIT	58
AMI ALIGN SYSTEM	49
AREXX	65
AZTEC C DEV PAK V5	375
ASSEMORO	143
BBC EMULATOR	109
DOS 2 DOS	69
POWER WINDOWS 2.5	115
PROJECT D V2	75
VIRUS PROTECT TOOLBOX	68
SOUND/MUSIC	
BARS AND PIPES	239
DR T MIDI REC STUDIO	89
DR T COPY APPRENTICE	139
DYNAMIC DRUMS	105
SONIX	79

All in stock items shipped the same day. Please allow 14 working days for delivery of out of stock items. Should your product be faulty please return disk only & copy of receipt for immediate free replacement. COD also available. Prices are subject to change without notice.

NAME.....	PH (.....)	BK/CARD/MASTERCARD/VISA NO.....	EXPIRY DATE.....
ADDRESS.....		Cheques payable to Briwall Australia	
CITY.....	STATE.....	SIGNATURE.....	
POSTCODE.....	COUNTRY.....	COMPUTER TYPE.....	
DESCRIPTION.....	QUANTITY.....	EACH.....	TOTAL.....
For complete list of products & prices, please tick AMIGA () C64/128 ()			

photograph and display a very realistic rendering of it on the screen. The best a straight black and white scanner can do is display a crude, "dotty" image of a continuous tone picture.

Character Reading

The Cameron scanner can snaffle up and decipher text as well as graphics. Optical Character Recognition (OCR) is the ability to turn a piece of scanned text into an ASCII text file. Right now the best OCR packages have about 95% accuracy which might sound flash but means there will be 50 bodgy characters in a thousand word text scan - that could add up to 50 misspellings. Scanned text needs a thorough washing through a good spelling checker.

There are two types of OCR software in use today. The first and most intelligent form is feature extraction where the software checks the attributes of the scanned characters against a list of attributes each character is known to have. A "p" would be listed as a vertical line with a closed semi circle in the upper right hand sector. This method allows flexibility in dealing with different fonts and font styles on the fly. OCR software using feature extraction are often called "omnifont" packages.

The second character recognition method is matrix matching or font recognition where the software is taught the characters for specific fonts along with the corresponding ASCII values. After scanning in

a block of text the OCR software checks each character with its list of stored characters. When it finds a match the ASCII character is pumped into an output text file.

The Cameron scanner comes with a matrix matching package called *Handy Reader* and has a ready installed font library which includes Helvetica, TimesRoman, Courier, LetterGothic, Pica, Prestige, Digits (numeric font), Typeface (for daisy-wheel text) and Bookface which is a mix of Times and Helvetica. New fonts can be "taught" in to the system by scanning in text and then building a new database by telling the software which ASCII character equates to which bit image.

Documentation

Documentation for the Handy Scanner comes in the form of two ring bound manuals, one for the OCR software and one for *Handy Painter*. The documentation is dreadful. Instead of employing someone who speaks English as their first language, Cameron appear to have handed the German originals over to a inebriated first year English student from the local Beer Keller. For example: "After a small run increasingly queries will be put whether the outlined character is a "...?" Yeah, sure. The heavy, twisted grammar isn't even funny like many Japanese/English translations. Machine language programmers will probably love it.

As hardware, I found the *Handy Scanner* an excellent piece of kit with its wide scan head, switchable resolution, grey scale ability and robust design. The supplied software and documentation need improvement.

Distributed by:
Pactronics
02 748 4700
RRP Amiga \$795



POPULAR MODULE EXCHANGE SERVICE

PARCOM Pty Ltd
Whites Hill Shopping
Village
Samuel St
Camp Hill, Qld 4152
(07) 395 2211

GAINRUN Pty Ltd
7/27 Justin St
Smithfield
NSW 2164
(02) 757 1055

Send your PCB, PSU, Drive or Mouse for next day replacement.

Reconditioned Modules available for most models e.g.

C64, 64C, 1541II PCB	\$99.00
A500 PCB	\$129.00
AMIGA DRIVE	\$200.00
MOUSE	\$50.00
A500 PSU	\$75.00

ALL ITEMS MUST BE COMPLETE AND IN SERVICEABLE CONDITION

**THREE MONTHS WARRANTY ON ALL MODULES
PLEASE CALL FOR FURTHER DETAILS**

AMIGA PUBLIC DOMAIN SOFTWARE

- Free delivery ● 1,000's of programs
- All orders despatched next day

One of the most comprehensive ranges of Amiga PD software.

- * FISH DISKS
- * AMICUS DISKS
- * AMIGAN DISKS
- * ALPHA DISKS
- * T-BAG DISKS
- * TOPIK DISKS
- * F.A.U.G. DISKS

All \$4.00 each

LATENIGHTER DISKS
\$5.00 each

Best of Public Domain
Over 450 of the very best from only \$2.95 per disk.

INTRODUCTORY PACK
comprising
PUBLIC DOMAIN CATALOGUE

1,000's of program listings
SAMPLE DISK

10 great games/programs
HINTS AND TIPS DISK

1.5 Megabytes of hints & tips
TUTORIAL DISK

Amiga Tutor and DOS Helper
GAMES DISK

7 fantastic games
UTILITY DISK

5 incredible utilities
Total Value \$36

Introductory Price\$19.95

- ☐ For only \$5 we will send our Catalogue Disk with a free game and virus checker PLUS a sample disk of 10 great Games/Programs.
- ☐ OR try our INTRODUCTORY PACK for only \$19.95. PLEASE TICK.

LEEJAN ENTERPRISES

PO Box 66 Happy Valley SA 5159 Tel (08) 322 3392

BANKCARD/MASTERCARD/CHEQUE/MONEY ORDER

BCARD/MCARD NOEXP.....

NAME.....SIGNATURE.....

ADDRESS.....PCODE.....

Yes, everything has been Price Warped in one Quantum leap...read on!

\$1 each

And you can get them by joining the Island Software Club public domain library for only \$4 ! Yes that's right, Full Club Membership for just \$4 and that includes full Membership to the Island Bulletin Board System as well! If you're already a Member, then pay for next years now and save! You'd have to be warped to buy great public domain software anywhere else at these prices! Disks include all of the Amiga FISH series and more! C64/128 users are also heavily supported. So note this: All p.d. disks regardless of disk size now just \$1.00 each when you supply the blank disk, and only \$2.00 each when we supply the blank disk. So don't wait, it's not going to get any better than this!

FIVE OF THE LATEST DISK RELEASES, ALL NEW SOFTWARE FOR AMIGA ONLY...	\$5.00
FIVE DISKS PACKED WITH ALL NEW C-64 SOFTWARE FROM THE U.S.A. ONLY...	\$5.00

KCS IBM XT ON A CARD FOR A500.	Full IBM compatibility with HD support!	\$549.00
SYNCR0 EXPRESS II FOR AMIGA.	The ultimate disk backup device!	\$110.95
AMIGA ACTION REPLAY II.	The old favourite at a new low price!	\$169.00
AMIGA ZYDEC REPLACEMENT MOUSE.	A hi-res, hi-reliability replacement	\$48.00
MAESTRO 2400ZXR AMIGA MODEM.	Covers all speeds to 2400 inc. 1200/75	\$359.00
MAESTRO 2400XR AMIGA MODEM.	All speeds to 2400 except 1200/75.	\$285.00
GPTERM V4.5 COMMS S/W AMIGA.	The one recommended by Discovery!	\$ 86.50

C64 FREEZE MACHINE CARTRIDGE.	Tape and Disk backup device now only . . .	\$52.95
C64 POWER CARTRIDGE.	Powerful Disk & Tape toolkit with reset.	\$ 47.95
C64 SOUND & GRAPHICS BOOK.	By Greg Perry. As serialized in ACAR!	\$ 8.50
GRAPHICS & SOUND SUPPORT DISK.	All the programs in the book on disk!	\$ 2.00
APROTEK 300/1200 MODEM C64.	A 1200 baud modem for the C64 at only . . .	\$135.00
GPTERM COMMS S/W FOR C64/128.	The 'does everything' package for C64.	\$ 59.50
C64 RAMDRIVE, MEMORY EXPANDER.	Real memory power, RAM based disk drive!	CALL
C64 RAM-LINK.	Overcomes C64/128 RAM expansion probs.	CALL

* Due to its popularity, please allow up to 2 weeks delivery on some hardware items. PD software orders are always sent within 24 hours.

BETTER STILL, WHY NOT FILL IN AND SEND THE FORM BELOW FOR A QUICK POSTAL RESPONSE!

Overseas orders must be drawn in Australian Funds.
Cheques & Money Orders should be made payable to ISLAND BY MAIL.

Card Holders Signature: _____

Well Eunice, you know how it is, all they want to do is

PLAY GAMES

Are your kids turning into game playing techno-feebies? How can you introduce some healthy software into their daily diet of binary bytes? Anne Glover expounds on the methods she recommends in such dire circumstances

As the computer was purchased to enhance the educational opportunities of the children, you probably had some grand visions that do not appear to be materialising. Perhaps you imagined Kate at the keyboard producing assignments the teacher could actually read, Julia introducing you to the world of telecomputing and Peter setting up databases of his favourite reptiles.

The reality instead is that computer activities are limited to devious and devilish acts of death and destruction. Or perhaps Peter has taken on the persona of "Larry", Kate has turned into Carmen Sandi-WHO-go and Julia needs to save a complete colony of lemmings before breakfast!

As a result you are a bit concerned about the direction computer activities have taken in your household. A teacher may suggest you take a look at the following areas if you are worried.

- Is the child spending an "inap-

propriate" amount of time with the computer?

- Are family relationships, school-work, friendships, behaviour, social activities, sporting activities or personality suffering because of this activity?

Children and of course adults need a balanced diet, both in their consumption of food and of intellectual stimuli. This doesn't mean they need to spend exactly equal amounts of time reading as they do socialising or writing essays. They do however need variety, a range of activities to be involved in, just as they do with food. Most children will naturally select a range of inputs and provide for themselves a healthy lifestyle, even if they do need an almighty push with the homework.

Computer game junkies

An occasional child will spend too much of their time, and become too involved in the world of computer games. Just as another child will spend too much time glued to the TV or another will try to live on nothing but junk food. All of these children (or adults) need some careful redirection.

If your children are not in this category you may still be concerned that they are "wasting" a lot of time playing games. Throughout history many parents have had the same concern, maybe not with computer games but with all the other games kids enjoy. Remember that games are often the way children learn, about their body, their mind and the world around them.

My toddler's latest game is to turn things "off" and "on", taps and sprinklers, power points and lights and even the fuse box has had a turn. He might be learning a lot but I hope the

lesson will be completed before winter time, I am already sick of being drenched. My four year old is into collecting rocks, large and small, dirty or clean, sometimes with its own wildlife attached. This is also not a lot of fun for Mum, especially when you stub your toe on them when creeping into their room at night or the toddler takes a liking to a larger one (twice the size of a brick) and he drops it on your other toe. I must grit my teeth and remember that this is how children learn, and perhaps how mothers do too.

If games are an effective way for children to learn, what are they learning from computer games?

To begin with you will need to examine the type of games your child is into but generally they can be a great introduction to computing. The kids may already be more computer literate than you are. They will be able (when they are ready) to move into more serious computing without the mental blocks that may inhibit the oldies.

Benefits

While playing the "dreaded" games the child may have developed a number of skills. These skills will vary with the age of the child and the type of games but could include: enhanced logical patterns of thought, understanding of sequences, development of memory, use of symbols, responding to actions, development of imagination and fantasy, enhanced language skills, understanding of maps, scales and directions, reading, spelling, counting, improved reflexes, keyboard and mouse familiarity, listening, concentration and comprehension skills.

Some of these skills may not translate themselves from the world of computer games, others however will help them at work and at play.

Children with special problems such as an attention deficit disorder or dyslexia could gain enormously from a carefully selected game that meets their specific needs. Here a true "game" could be a valuable educational tool.

What to do

If your Amiga is still relatively new, the obsession with games could be an early fad as they become used to the machine. Games are very attractive to big and little kids and it is understandable that they attract a lot

Continued on p24



JOIN THE Australian Amiga User Association

AmiOz BBS(02) 627 4442 24hr

The Australian Amiga User Association Inc. is one of the largest user groups in Australia, it was formed over 4 years ago to help the User get the most out of the Amiga Advanced system. Members receive help with the working of the Amiga Operating System, from setting up the Amiga, to application programs and the Amiga outstanding graphic capabilities, the members get the best help we can give through our professional Amiga Australia magazine and our Amiga only Bulletin Board AmiOz BBS. Lots of our members make there own hardware and pass them on to other members at very little cost. We have members using application programs on graphics, animation, multimedia, music and desktop publishing.

Membership includes

Amiga Australia magazine

Public Domain Software Library is one of the biggest in Australia and one of the cheapest, with over 600 disks. The A.A.U.A. has a large *Amiga* Computer Show each year for all to see the *Amiga* "The *AmiForum* *Amiga* Computer Show" members get involved helping to put on the show each year. Our *AmiOz* BBS Bulletin Board is all *Amiga*, and runs the most unique software system in the world, *SkyLine*, and uses the *SkyPix* graphic protocol that let you used your mouse as well as the keyboard. The A.A.U.A. has open days in the Sydney area each Month for their members to see the latest in Software and Hardware. Workshops on area of the *Amiga*, the CLI *AmigaDOS*, *WorkBench*, Graphics, Music, animation, desktop publishing and business programs.

Australian Amiga User association Inc. Membership Application Form

Name:.....

Address:.....

Suburb..... Post Code:.....

Ph. No:.....Male:.....Female:.....

Age:.....Occupation:.....

**The Australian Amiga User Association
Inc. P.O. Box 389 Penrith 2750
N.S.W Australia**

Send cheque or money order made out to A.A.U.A.
or use your credit card

I authorise The Australian Amiga User Association Inc.
to debit my ☐ Bankcard ☐ Mastercard account for
the amount of \$35.00 My card number is

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Signature:.....

Expiry Date:.....

I understand I should receive my Australian Amiga User
Association Inc. Membership package within 4 weeks

Signature:.....

Date:.....

INTERLINK

"THE MAIL"

Bringing you the best for your AMIGA

ARCADE GAMES

AIR COMBAT USA	67.90	LOTUS ESPRIT TURBO	66.90
ARACNAPHOBIA	66.90	MIGHT BOMB JACK	66.90
AWESOME (w/T-Shirt)	76.90	N.A.R.C (Ocean's Newie)	66.90
BACK TO FUTURE II	56.90	NIGHT HUNTER	56.90
BAR GAMES	56.90	NITRO (Multi-Player)	56.90
BATTLESTORM	76.90	PANG	66.90
BILLY THE KID	CALL	PRINCE OF PERSIA	56.50
BOULDER DASH CONS.	16.95	RICK DANGEROUS 2	56.90
CARVUP (Cute)	56.90	ROBOCOP II	69.90
CRIME WAVE	66.90	SHAD/BEAST II w/T-Shirt	76.90
DRAGON'S LAIR II	86.90	SILKWORM IV	66.90
E-SWAT	56.90	SIMULCRA	48.90
FLIMBO'S QUEST	56.90	STRIDER II	56.90
GREMLINS 2	56.90	SUPER CARS II	CALL
HARD DRIVIN II (Linkable)	56.90	SUPER MONACO GP	66.90
JAMES POND (For Kid's)	56.90	SUPER OFF ROAD	56.50
JUPITER MASTER DRIVE	56.90	TEENAGE MUT. TURTLE	66.90
LAST NINJA REMIX	66.90	TURRICAN II (Excellent)	56.90
LEMMINGS (Great Fun)	66.90	VIZ (R-RATED)	56.90
LINE OF FIRE	56.90	WRATH OF THE DEMON	66.90

STRATEGY GAMES

BATTLE COMMAND	66.90	NOBUNAGA'S AMBITION II	86.90
BETRAYAL	76.90	PANZER BATTLES	46.90
BLITZKREIG MAY 1940	56.90	PORTS OF CALL	66.90
BATTLE ARMINNES	56.90	POWERMONGER	47.90
CENTURIAN-DEF ROME	62.90	POWERMONGER US CIVIL	CALL
DAS BOOT (Sub-Sim)	56.90	POWERMONGER WWI	CALL
DEBUT (Planetary Sim)	56.90	RAILROAD TYCOON	86.90
DEUTOROS	CALL	RORKES DRIFT	56.90
FIRE BRIGADE (Classic)	46.90	SECOND FRONT	56.90
GENGHIS KHAN	76.90	SHERMAN M4	56.90
GUNBOAT (New)	66.90	SILENT SERVICE II	CALL
HALLS OF MONTEZUMA	CALL	SIM CITY GRAPHICS DATA	56.90
HARPOON	66.90	SIM EARTH	CALL
HARPOON DATA 2	49.50	SUPREMACY	66.90
HUNTER	CALL	TOWER FRA	57.90
M1 TANK PLATOON	76.90	UMS II	76.90
MIDWINTER	76.90	WALL STREET WIZARD	56.90
MIDWINTER II (Better?)	76.90	WAR GAME CONS SET	46.90
MOONBASE	CALL	WHITE DEATH	56.90
NAM	76.90		

SPORTS GAMES

4D SPORTS BOXING	CALL	KICKOFFII-FINALWHISTLE	33.90
4D SPORTS DRIVING	CALL	M.U.D.S	66.90
AMIGA CRICKET	46.90	PARIS-DAKAR RALLY	56.90
BRIDGE SIMULATOR	66.90	PGA WORLD TOUR GOLF	66.90
CELICA GT-4 RALLY	56.90	PRO TENNIS 2 (HD able)	66.90
CRICKET CAPTAIN	CALL	SKI OR DIE	56.90
INDIANAPOLIS 500	46.90	TEAM SUZUKI	66.90
INT'L WRESTLING	46.90	TOURNAMENT GOLF	56.90
J. NICKLAUS UNLIMITED	76.90	TOURNAMENT SOCCER	56.90
KICK OFF II	56.90	ULTIMATE RIDE	66.90

ADVENTURE GAMES

BARD'S TALE III	CALL	DUCK TALES	56.90
B.A.T	66.90	ELVIRA	76.90
BUCK ROGER'S	56.90	EYE OF BEHOLDER	CALL
CADAVER	56.90	HERO'S QUEST	66.90
CAPTIVE	56.90	IMMORTAL	46.90
CAPTIVE MISSION	CALL	KNIGHTS OF LEGEND	CALL
CHAOS STRIKES BACK	66.90	LEGEND OF FAERGHAIL	56.90
CODENAME ICEMAN	66.90	MEAN STREETS	66.90
COLONEL'S BEQUEST	66.90	OBITUUS	76.90
CORPORATION	56.90	SEARCH FOR THE KING	66.90
CORPORATION MISSION	46.90	SECRET MONKEY ISLAND	66.90
CONQUESTS CAMELOT	66.90	SECRET SILVER BLADE	CALL
DEATH KNIGHTS KRYNN	CALL	WIZARDRY-BANE FORGE	82.90
DRAGON WARS	76.90		

FLIGHT SIMS

BLUE MAX	66.90
F15 STRIKE EAGLE II	CALL
F19 STEALTH FIGHTER	76.90
F29 RETALIATOR II	CALL
FALCON	56.90
FALCON MISSION DISK 2	46.90
FLIGHT OF INTRUDER	CALL
HAWK	CALL
MEGA FORTRESS (B-52)	66.90
MIG-29	66.90
SECRET W. LUFTWAFFE	CALL

BUSINESS

CYGNUS ED PRO	129.00	PEN PAL	178.00
DATA RETRIEVE	96.90	PERS'L FINANCE MANG.	68.90
DATA RET. PROFESS'L	185.00	PHASAR V4.0	95.00
DESKTOP BUDGET	95.00	PRO PAGE V2.0	449.00
EASY LEDGERS	379.00	PROWRITE V3.1	179.00
EXCELLENCE V2.0	289.00	SCRIBBLE PLATINUM	87.90
FREELANCE	48.90	SUPERBASE	76.90
HOME ACCOUNTS	85.00	SUPERBASE 2	125.00
HOME FRONT	125.00	SUPERBASE PRO 4	CALL
PAGESSETTER II	169.00	SYSTEM 3	129.00
PAGESTREAM V2.1	369.00	SYSTEM 3E	155.00
PAGESTR. FONTS (ea)	54.50	WORKS PLATINUM	189.00
PAGESTREAM FORMS	49.50	YOUR FAMILY TREE v2	119.00

**FREECALL
008
ORDER
LINE**

9am-5pm Mon-Fri
(Credit Card Orders Only
Please)

008 020 633

(For all queries about prices and
availability please use our
Customer Service Line)

Please note that prices and
availability are subject to
change without notice. Any
software product without a
price (i.e. with "CALL") has not
been released as at 1/4/91.

GRAPHICS

3D PROFESSIONAL	495.00	FLOOR PLAN CONST.	78.50
3D TEXT ANIMATOR	74.50	IMAGINE	479.00
AEGIS GRAPH. ST'R	89.00	INTROCAD PLUS	175.00
ANIMATION STUDIO	245.00	MODELLER 3D	115.00
ART DEPARTMENT	129.00	PAGE FLIPPER +FX	179.00
ART DEPARTMENT PRO	339.00	PIX MATE	79.50
CREDIT TEXT SCROLL	56.90	PRINTMASTER PLUS	56.90
DELUXE PAINT III	98.90	PROFESSIONAL DRAW 2	259.00
DELUXE PHTOLAB	98.90	PROMOTION	115.00
DELUXE PRINT II	98.90	SCENE GENERATOR	74.50
DELUXE VIDEO III	98.90	SPECTRA COLOUR	115.00
DESIGN 3-D	139.00	TITLE PAGE	179.00
DIGI-MATE 3	59.50	TURBO SILVER 3D	175.00
DIGI-PAINT 3	119.00	TV TEXT PROF.	189.00
DIGI-WORKS 3D	185.00	ULTRA DESIGN	439.00
DIRECTOR II	185.00	VISTA	145.00
DIRECTOR TOOLKIT	59.00	VISTA PRO (Needs 3MB)	189.00
ELAN PERFORMER 2	189.00	X-CAD DESIGNER	229.00

UTILITIES

AMAX II (software only)	349.00	FAT TRACKS (Copier)	89.50
AMI ALIGNM'T KIT	69.50	GFA BASIC	145.00
AMIGA VISION	189.00	GP TERM	99.00
AMOS	119.00	HI-SOFT BASIC	179.00
AMOS COMPILER	CALL	HI-SOFT EXTENSION	59.50
ARXX	74.00	KCS POWER BOARD	679.00
ATONCE (PC EMUL)	CALL	KDV VIRUS KILLER	24.95
AZTEC C PROF.	395.00	NO VIRUS	49.50
BENCHMARK MODULA-2	279.00	PELICAN PRESS	145.00
CAN DO	195.00	PIXEL SCRIPT	169.00
CAN DO PRO PACK	64.50	QUARTERBACK v4.0	84.50
CROSS DOS V4.0	59.50	QUARTERBACK TOOLS	99.00
DEVPACK 2.0	149.00	SAS/LATTICE C V5.1	455.00
DIRECTORY OPUS II	57.90	SAS/LATTICE C++	559.00
DISK LABELER	59.50	STARSOFT HD BACK	69.50
DISK MECHANIC	119.00	SUPERBACK	109.00
DOCTOR AMI	59.50	SYNCR0 EXPRESS III	139.00
DOS LAB	39.50	VIDEO TOOLS ON TAP	119.00
DUNLAP UTILITIES	99.50	XCOPY + Hardware	139.00

**DO YOU WANT IT
FASTER ?!!**

**OVERNIGHT!
\$10 per Parcel**

Call for details

MUSIC

AMAS	279.00	DR T'S TIGER CUB	119.00
AUDIO ENGINEER PRCF	429.00	MASTER SOUND	119.00
AUDIO MASTER III	129.00	MASTER TRACKS PRO	539.00
BARS & PIPES	389.00	MUSIC X JUNIOR	189.00
DELUXE MUSIC CS	98.90	PERFECT SOUND	179.00
DR T'S COPYIST APPR	149.00	QUARTET	96.50
DR T'S COPYIST DTP	449.00	SOUND EXPRESS	127.50

The Ultimate AMIGA Source

of attention, especially initially. It may just be the first stage, later they may be more interested in exploring the other capabilities of this technology. So be aware that your computer's usage will probably change over time and don't be overly concerned about an imbalance in the early months.

I can remember when our Amiga was new, a friend and colleague reassured me that my "big kid's" obsession with computer games was just a fad. Her boys still play games from time to time but now use their computer for a wider range of uses. To this date I cannot say my 36 year old "kid" has such a balanced approach to computer usage.

Just as most parents monitor the types of TV programs, the videos that their children watch as well as the friends their children associate with, so they will monitor the types of software their children have access to.

If your children are spending a lot of time with the computer, then the selection of software is most important. With young children you probably have a high degree of control, as you will be selecting all of their software for purchase. As the kids get older you will need to prevent any pirated software from entering your home, not such an easy task. From a moral point of view as well as an educational point of view it is worthwhile insisting on this basic ground rule.

Much of the software currently available for the Amiga does not fit neatly into the education or the entertainment categories, programs can easily straddle both areas. After all education can indeed be fun! Some of these programs are really worth purchasing and may overcome your dilemma of too high a concentration on games. If the educational programs are fun, the kids are more likely to spend a lot of time on them.

Examples of these "edu-tainment" programs include the *Carmen Sandiego* series, *Sim City* and *Ports of Call*. If the kids are spending a lot of time with the computer, you may feel more comfortable if the games have an educational emphasis.

Another approach is to play the games with your children. You never know, you could learn a lot, both about computers and about your child, and have some fun along the way. Family relationships could improve in other areas as a result. The whole family could end up spending an "appropriate" amount of time playing games. □

1st SHAPES

by Anne Glover

How would your child like to get into a toy factory and start designing their own toys? Just imagine some of the incredible ideas in your child's head leaping to life in this factory. Perhaps a mini spaceship to take them out of this world (and maybe back again) or a little teddy that cleans up their room as it talks and plays around, or perhaps a magic wand to make their little sister or brother disappear. Wild imaginations will lead to some fanciful toys!

First Shapes, from First Byte, USA, allows your child to enter the secret domain of the toy factory. Although it will not extend as far as your child's seemingly limitless imagination, it will provide a lot of fun and serve an educational purpose at the same time.

The Toy Factory allows the child to play around with five basic shapes (circle, square, triangle, rectangle and oval) as they learn to become familiar with them. The child uses the shapes to make up their choice of 10 different toys in a multitude of ways. For example a clown's head could be any of the five shapes, as can his body and legs, each making him different from the last clown and the next clown.

After custom designing their toy the program runs through the shapes the child has used.

Their toy may then be stored in their computer "Toy Box" if they wish. It can also be printed before the budding designer moves onto the

next project. This is a fun way to introduce these shapes to a young child.

Another activity on the *First Shapes* program is simply called "Shapes". This is an even simpler introduction to

the five shapes. This game shows and names a shape, then allows the child to ask for it to be made larger or smaller. So the concept of size is also being introduced.

After the child is fairly familiar with these five shapes they are ready to enjoy the "Toy Fair". Here they are required to help teddy knock the bottles down (or ring the bell etc.) by selecting the right shapes. The program may ask the child to select "the triangle", or "the smallest shape" to help teddy.

To reinforce their knowledge of the five shapes a game of concentration is included. Three levels of difficulty with a choice of playing by themselves, with a friend or with teddy give this matching game plenty of scope.

Conclusion

This program introduces five basic shapes to young children. The concept of size is also addressed. As far as it goes it is a great program. I don't see it spanning the age group suggest on the package (ie 3-8 years) but rather the 3-5 year age group. An older child having some difficulty with these concepts would also benefit while having some fun at the same time.

Distributed by:
Dataflow
02 331 3665
RRP: \$54.95



1st Letters Words

by Anne Glover

Here is another excellent program from First Byte. Like many First Byte products it is a quality talking program and can be custom designed (to a degree) to suit your child. *First Letters and Words* is ideal for the 4-7 year olds.

This program attempts to help children:

- Identify the upper and lower case letters of the alphabet.
- Locate the alphabet keys on the computer keyboard.
- Associate letters with words that use those letters in the initial position.
- Achieve sight recognition of a 76 plus word vocabulary.
- See how each letter would be drawn with pencil and paper.
- Take a written and spoken description and associate it with a familiar animal or object...

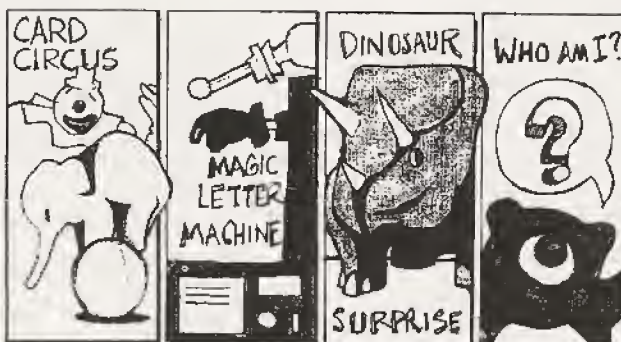
If all of that sounds a bit drab and boring it is only the objectives of the program. The way these objectives are achieved is through having lots of fun as you will see below.

The Magic Letter Machine carefully and slowly draws any letter the child selects from the keyboard. After "thinking" for a few seconds, the Magic Machine then produces a picture of something that begins with the chosen letter. So if the child selects "k" on the keyboard, the machine slowly and correctly draws a "k" then produces a picture of a kangaroo or a kite or a king. Different pictures appear if the same letter is selected a number of times. While this is happening the computer is talking to the child, saying "the letter k" and "k is for kangaroo" etc.

With the help of this program the child will become familiar with the letters of the alphabet, words that begin with these letters, as well as how to pronounce and write the letters - a truly "Magic Machine".

Identifying upper and lower case letters is a problem for some children. The problem may even be accentuated in these "computer toddlers" who are so familiar with the upper case keyboard. The "Card Circus" game requires the child to match upper and lower case letters to start the circus rolling. If an incorrect selection is made, that letter disappears, giving the child a better chance next time. This talking program allows the child to hear the letters pronounced and then see the clown juggle, or the teddy walk on a tightrope, etc.

For the more competent a guessing game is also included ("Who Am I?"). The computer shows and reads a short paragraph that gives a clue to the animal or object in question. At the easy level the answer is also produced, the child only needs to copy it in using the keyboard. At the medium level three words are presented to be selected from (a sort of kiddies' multiple choice). At the hard level



\$100 OFF!

Audio Engineer^{Plus}

The Top Quality Stereo Sound Recording and Editing System for the Amiga.

That's right! For a limited time only, you can trade in any old Amiga sound sampler direct to GSOF and purchase the highly acclaimed Audio Engineer Plus for only \$329.00+P/H. That's an incredible "\$100 OFF" our normal retail price!

Take advantage of this FANTASTIC trade-in offer NOW!

Just send your old sound sampler and payment of \$329 + \$10.00 postage and handling to:

GSOF PTY LTD. 24 Commodore Pde. Smithfield West. South Australia. 5114. Phone/FAX 08 254 2261

Name	
Address	
City	State
Post Code	Phone
I endorse my cheque/money order for \$339.00 OR please debit my	
<input type="checkbox"/> BankCard	<input type="checkbox"/> Visa Card <input type="checkbox"/> MasterCard
Expiry Date	
<div style="display: flex; justify-content: space-around;"> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> </div>	
Signature of CardHolder	

A.C.N 007 060 728. A working home made sampler qualifies as a trade-in. Offer Expires 31/7/91

only the number of letters are indicated. When the child types in a word all the correct letters are accepted, in whatever order. Any incorrect letters are ignored. Once the word is complete, it is spoken, spelled and a picture of the mystery object appears.

This program has a few American pronunciations and spellings, the colours are a bit drab and it probably doesn't adequately span the 3-8 year age group indicated. Apart from those shortcomings, which I think are minor, it is an excellent program. As an added bonus *Dinosaur Surprise* is included, a screen-based colouring book to add a bit of variety.

Conclusion

A fun introduction to letters and words, one well worth buying for the 4-7 year olds.

Distributed by:
Dataflow
02 331 3153
RRP: \$54.95

Mixed *up* Mother Goose

by Anne Glover

And now for something completely different. Remember the Sierra organisation and Roberta Williams? She designed the *Kings Quest* series amongst others. Roberta has now put her hand to a children's adventure with *Mixed-up Mother Goose* and it is a beauty!

After matching up Little Bo Peep with her sheep, for example, the completed nursery rhyme is played by a grateful little character. When the whole game has been completed the rhymes will be jumbled again, randomly, so each game represents a new challenge.

Children do not need to be able to read to take part in this adventure.

their preferred method of movement, or perhaps you could encourage them to change the method of movement from time to time.

Fortunately each game can be saved for an additional session on another day, so you won't have the five year olds up burning the midnight oil. Up to 12 different games can be saved which may be useful for teach-

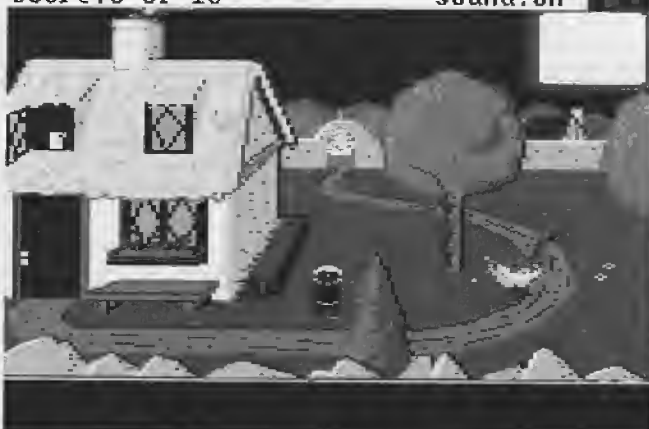
Score: 0 of 18

Sound: on



Score: 0 of 18

Sound: on



Your child will be able to wander through nursery-rhyme land and meet many of their favourite characters. The player has a very important role in this adventure. As you will see, the nursery rhymes have been jumbled up leaving many distraught little people. Little Bo Peep for example has lost her sheep but has in her possession somebody's tuffet. Mary Mary (quite contrary) may have a pie but would much prefer a watering can for her silver bells and cockleshells.

The child's role is to locate the correct objects or animals for their nursery rhyme friends. Initially this may appear to be a fairly simple task, but as the land is quite large (44 screens) with 18 different rhymes to unjumble, your child will be involved for quite some time. To help them become immersed more fully into the role, several images are presented for the child to select their own representation.

the nursery rhyme characters talk to the child in words and in pictures. Humpty Dumpty tells the player he needs a ladder, then a picture of the required object appears making it easier for the child to identify it and locate it later. Only one object can be carried at a time so the child needs to trade objects as they move around this wonderful fantasy land.

Mixed Up Mother Goose is designed for children of four years and older. Many three year olds who are into nursery rhymes will enjoy this program with your assistance. Once a young child becomes familiar with *Mixed Up Mother Goose* they will probably take over, as only a few keys are needed to play the game. Characters can however be moved around using the mouse or the joystick instead of the keyboard if they wish. No doubt your child will find

ers as well. This program will be well loved by all those little kids and big kids that enjoy nursery rhymes. It has bought our old favourites into the 1990s with a bang. Not strictly an educational program but one that amply spans the education / entertainment spheres.

Certainly worth a look for something a little bit different.

Distributed by:
Ozisoft
02 313 6444
RRP: \$49.95

Communications UPDATE

by Jonathan Scowen

In this month's column we'll be looking at data compression for file transfers and Telecom's Discovery. Before we kick off, I would like to say a big thanks to all those people who wrote to me or called my BBS with positive comments about this column. The editor has decided to keep it going!

File compaction

Regular modem users are often found compressing and decompressing files. But what is the point of doing this? Well, it saves money and time.

First of all, several files can be sent in one hit by joining them together as one big file. As the files are joined, the compression program packs the information using special algorithms to remove repeated sequences of data and replace them with codes which can be expanded back to the original data later on. The resulting file is much smaller, meaning it will take less time to transfer the file.

Some people refer to this process as archiving. Whilst this is partially correct, the term archiving refers purely to the fact that compacted files are often stored away as an archive of no longer required files. The correct term is compression.

How do we compress files? There

are many programs available which all have different compressing speeds and sizes. A few popular programs are:

DiskMasher	Warp
LhArc	Zip
LhWarp	Zoo
Arc	Pak

Compressing whole disks

This is done in several ways. To archive a disk you need a program that can create the directories when unarchiving. In the beginning *Warp* (.WRP) was used. *Warp* was slowly replaced with *LhWarp* (.LHW). Then people just used *LhArc* (.LZH) which is mainly used for programs (some *LhArc* unarchivers do not create directories, so be careful). The latest utility to handle this job is *DiskMasher* (.DMS).

I used *DiskMasher* and *LhWarp* on the same disk and outputted the file onto a hard drive.

DiskMasher (.DMS) was quite difficult to work out, but was still understandable when you knew how. *DMS* also allows encrypting, meaning that to uncrunch, a password has to be entered. Several compression methods are available (I used the default compression rate). It also allows a text file to be enclosed. While crunching, *DMS* shows you the size uncrunched and the size it is crunching it to. At the end of the crunching session it tells you the size of the output file, number of tracks it compressed, time taken and the rate (ie tracks per minute). *DMS* also took advantage of colours to make it more understandable.

LhWarp usage was more like the usual compressors and made it very clear how to use it and like *DMS* also allowed a text file to be enclosed. *LhWarp* while crunching uses the disk bit map to skip empty parts of the disk. *LhWarp* was VERY slow compared to *DiskMasher* as shown below. At the end of crunching it tells you the input and output sizes. (see table below).

Although *LhWarp* was able to achieve a smaller output size, I think that a different mode of compression on *DMS* could have produced a better result, but taken a bit longer.

Overall, *DMS* was better. *DiskMasher* can be found on the majority of BBS's and if not ask someone on a multiline BBS or ask your SysOp to get it for you by file requests. As a last resort you could even try my BBS or by mail and I will get it to you as soon as possible.

Discovery!

New services are being added all the time to Telecom's Discovery. The available services now include:

AAP News Report
National & International Databases
Online Banking
FlightComm Information
OTC
IntelNet Electronic White and Yellow Pages
Mediatel Electronic Messaging
Aust. Bureau of Statistics
Fax Transmission
Dow Jones News Retrieval Service
Metex Weather reports
Official Airlines Guide
Money Watch
Shopping
Racing news and Betting
Games

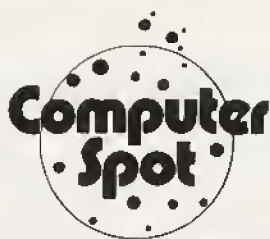
How useful are all these wonderful services?

The Electronic White and Yellow pages allows you access to 55 telephone directories and over seven million names. The Online Banking service is available 24 hours a day with the Commonwealth Bank, you can obtain Mastercard / Bankcard / Keycard account information and details of the last 150 transactions can be viewed. Australian Bureau of Statistics offers 148 different topic headings and information 24 hours a day plus other Government databases.

Charges vary from 5 cents per page to 20 cents a minute depending on the time you call, plus a registration fee of \$60.00 (which includes software for IBM's and compatibles) plus an additional \$15.00 monthly

Continued on p32

	Version	Author	Output Size	Crunch Time	Uncrunch Time
DiskMasher	1.02	SDS Software	671280 bytes	10.29 mins	1:05 mins
LhWarp	2.01	J. Forbes	641224 bytes	19.23 mins	6:29 mins



STOP PRESS!
1802 Colour Monitor

\$249

Suits C64, Amiga Starter Pack, VCR,
Nintendo and Megadrive.
(Cables may be required)

Computer Spot
MAIL ORDER
TOLL FREE (008) 252 130
FOR ORDERS ONLY
PHONE (02) 638 2897

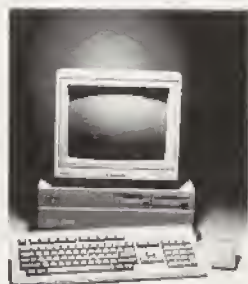
PRICE DEVASTATION

AMIGA 2000

Latest Version 1.3

30 Only
All Brand
New

Bonus 8
FREE
Games



Save
\$270
Hurry!

(Monitor not included)

\$1399

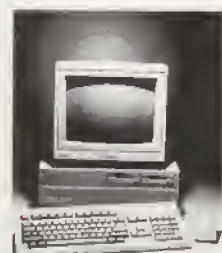


AMIGA 2000 HD

Includes 40 Mb Hard Disk

Save
\$200

20 Only
Hurry!



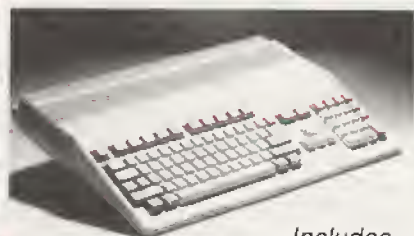
Bonus 8
FREE
Games

(Monitor not included)

\$2195

HOT! AMIGA 500 MEGA PACK

Save
Over **\$200**



\$799

Includes
Amiga 500 • Mouse
2 Joysticks
plus \$180 worth of
software (see below)

BONUS
8 FREE
games

AMIGA 500 SOLUTION

Amiga 500	\$799
Phillips Monitor	\$489
Star NX1000CL Printer	\$399
Cable	\$39
Kindwords	\$99
512k Ram Expansion	\$139
\$240 of software - see below	\$240

\$1899

BONUS
8 FREE
games.

TOTAL

\$2204

Save over
\$300

Colour Printers



Star NX100CL
9 pin colour
Extra \$120
worth of software
(see below for titles)
\$399



Citizen 200 GX
9 pin colour
Extra \$180
worth of software
(see below for titles)
\$499



Citizen GSX 140
24 pin colour
Extra \$240
worth of software
(see below for titles)
\$799

Remote Control
Joysticks
Micro Switched
\$49.95

Trade in your Amiga
500 Today!
for **\$400**

(Assuming complete V1.3 in working order + boxes)

Avtek Modem
300/300
suits Amiga or PC



\$99

68030
25 Mhz Board
\$1399

inc 2 Megs suit
A2000 only

Roctec
Genlock
\$299

Suits ALL Amigas
Includes test software

* For special software offer select from:
Airbourne Ranger, Pictionary, Creature,
Pipe mania, Drakken, Microprose
Soccer, Kindwords and more.

AMIGA

"No Fuss" Software Exchange Policy
If it doesn't work when you get home,
we'll replace it!



PC SOFTWARE & HARDWARE

ART & UTILITIES

BROADCAST TITLER PAL	Requires 1meg chip 2meg fast BEST	399.00
DELUXE PAINT 3	If you own an Amiga OWN THIS!	99.95
DELUXE PRINT 2	Posters and banners, supports colour	99.95
DELUXE VIDEO III	Design & run video productions	99.95
DESIGN 3D	3D designing package	159.95
DIGIVIEW GOLD 4	Voted, best digitizer, new dynamic res	299.00
DISTANT SUNS	Astronomy Software excellence	99.95
FANTAVISION	Animate your art	89.00
SCULPT ANIMATE 4D	Ultimate 3d render/animation system	799.00
VISTA	Fractal landscape generator system	149.95
PROMOTION	Build movement scripts for videospace	129.95
AMIGA VISION	Icon based software authoring system	149.00
AMOS	Games / demos creator language	129.95
AREX	Programming language	84.95
ARG ASM	Fastest assembly language compiler	139.95
B.A.D.	Speed disk access	89.95
CROSS DOS	Access msdos files on amiga drives	59.95
DEVPAK	Programmers assembly language	189.95
DISK MASTER	High quality file utility	69.95
DOS 2 DOS	Convert lbm/amiga files	79.95
GPTEEM	Comm's with viat	99.95
KDY-5	Control the virus!	24.95
LATITUDE C COMPILER 5.1	The #1 c compiler	499.00
PAFFICE VIDEO POST	Video titling with anti aliased fonts	399.00
MAVERICK	Disk based games copier Parameters	79.95
MEGA DOS	Amiga dos tutorial	19.95
MEGADISK	Vol. 2 thru to 20 available	19.95
QUARTERBACK 4.0	Hard drive back up tool!	99.95

ARCADE & ADVENTURE

AWESOME HOTTEST	new arcade hit 3 disks!	79.95
ANARCHY	New release	59.95
ATOMIC ROBO KID	Great new arcade hit!	59.95
B.A.T	Sci-Fi adventure	69.95
BACK TO THE FUTURE 2	Adventure game of the movie	59.95
BADLANDS	3D car racing overhead view	69.95
BATTLE MASTER	Role playing games	69.95
BUCK ROGERS	Classic sci-fi hero fun	49.95
B.S.S.JANE SEYMOUR	Sci-Fi Role Playing hit game	59.95
CADAVER 3D	arcade adventure	59.95
CAPTIVE	Sci-fi role playing action game	69.95
CARTHAGE	Strategy from psynosis	69.95
CINEMAWARE BUNDLE	Defender crown King Chicago/SDI	39.95
CURSE AZURE BONDS	D&D epic adventure series	49.95
DAMOCLES	Mercenary 3 fantastic game 3D	49.95
DOUBLE DRAGON 2	Golden Classic	49.95
Dragons Lair Time Warp 2	New version	89.95
ELVIRA	Hot adventure game fun with	79.95
FIRE & FORGET 2	3D Car racing shoot em up	59.95
GHOSTS & GOBLINS	The arcade classic is fantastic!	49.95
GOLDEN AXE	Arcade smash hit	59.95
GREMLINS 2	Hit game based on the movie	59.95
HEROES QUEST	Sierra adventure fun	59.95
IMMORTAL	3D Arcade adventure	59.95
JUDGE DREDD	Arcade action from comic classic	59.95
JAMES POND	Detective fish arcade fun	59.95
KILLING GAME SHOW	Hot new shoot em up strategy	69.95
LEMMINGS	You'd be crazy to miss this!	69.95
LOTUS TURBO ESPRIT	2 player dual screen racing fun	69.95
NUCLEAR WAR	Play the part of the maddest people	49.95
NIGHT BREED	Excellent 3D adventure	59.95
MIG-29	Soviet flight simulator	69.95
MAGIC FLY	3D Space action strategy game	49.95
MIDNIGHT RESISTANCE	Arcade action game	59.95
MONTY PYTHON	Arcade Flying circus madcap fun	59.95
NARC	Great arcade conversion	69.95
NITRO	Hot new car racing fun	59.95
NINJA WARRIORS	Superb quality arcade hit	54.95
ORBITUS	New graphic advent from psynosis	69.95
OPERATION COMBAT	New release	79.95
PANZA KICK BOXING	New release	59.95
PROFESSOR MARIARTI	New release	49.95
RICK DANGEROUS 2	Top quality arcade fun	59.95
ROBOCOP 2	Arcade smash em up go robo	69.95
SHADOW OF BEAST 2	Show off your amiga today!	79.95
SHADOW WARRIOR	Kung fu action arcade	59.95
SHOCK WAVE	Sci-Fi action	49.95
SPY WHO LOVED ME	007 arcade action game	59.95
STUN RUNNER 3D	Fast paced action	69.95
STREET ROK	Buy it, build it up, n' race it!	49.95
STRIDER 2	Sequel to great arcade game	69.95
Teenage Mutant Ninja Turtles	Ask your kids!	69.95
TURRICAN	Great arcade shoot up!	59.95
TORVAK WARRIOR	New Release	69.95
ULTIMATE RIDE	New Release	59.95
U N SQUADRON	Arcade hit	59.95
VENUS FLY TRAP	Arcade super sci-fi plant fun	59.95
WHEELS OF FIRE	Excellent car compilation pack	49.95
WINGS	Cinemaware shines again! fantastic	79.95
WRATH of the DEMON	High quality adventure game	89.95
Wonder Boy In Monster Land	Arcade smash hit	49.95
XIPHOS	Hotter NEW shoot em up!	59.95
BATTLE COMMAND	3-D tank simulator	69.95
CAPTIVE	Sci-Fi role playing game	59.95
CELICA GT4	Excellent new rally cross game	69.95
CHASE HQ 2	High speed racing fun	69.95

CHAMPIONS OF KRYNN	Role playing epic	59.95
CORPORATION	Sci Fi role playing	69.95
Corporation Mission Disk	continue the adventure	49.95
CODENAME ICEMAN	Sierra secret agent adventure classic	59.95
COLONELS BEQUEST	New release sierra adventure	59.95
CONQUEST OF CAMELOT	A highly recommended sierra adventure	59.95
DRAGON FORCE	Sci-fi role playing combat team	59.95
DUNGEON MASTER	3D excellent role playing	69.95
Dungeon Master Data Disk 1	Chaos strikes back, requires above	59.95
KINGS QUEST 4	The classic comes to the amiga	59.95
LOOM	Adventure game epic	59.95
LEGEND OF FAERGHAIL	3D role playing epic	59.95
LEISURE SUIT LARRY 3	Sierra hit adult adventure	59.95
MEAN STREETS	Sci-Fi detective adventure	69.95
MIDWINTER	Epic 3d arcade adventure	79.95
MIGHT & MAGIC 2	Known as the best role playing epic	59.95
MURDER	Cluepo type mystery detective game	59.95
NOBUNGAS AMBITION	VERY HEAVY QUALITY ADVENTURE	79.95
NARCO POLICE	Great new arcade game	59.95
POOL OF RADIANCE	D & D role playing game	49.95
POLICE QUEST 2	More crime bustin' adventures!	59.95
RANX	Crazy new futuristic game	59.95
TOTAL RECALL	Arcade movie tie-in	69.95
SPACE QUEST 3	Outer space sierra	59.95

SIMULATORS & STRATEGY

A-10 TANK KILLER	3D war strategy action	69.95
Advanced Destroyer Simulator	Naval strategy	69.95
ACTION STATIONS	WWII naval strategy	59.95
BLUE MAX	W.W.1. flight simulator	69.95
BATTLE OF BRITAIN	Their finest hour!	59.95
DAS BOOT	W.W.W.1. submarine simulation	69.95
F16 COMBAT PILOT	The fighting simulator	54.95
F29 RETALIATOR	3D combat simulator	59.95
FIGHTER BOMBER	Voted best game! combat simulator	49.95
F19 STEALTH FIGHTER	Absolutely amazing!	79.95
HUNT FOR RED OCTOBER	Submarine strategic warfare	49.95
INDIANAPOLIS 500	3D Car racing Game Of The Year 90'	49.95
GENGHIS KHAN	Ancient orient strategy	99.95
Bandit King Of Ancient China	Deep and involved strategy	69.95
BATTLE CHESS	Famous animated chess game	59.95
BLITZKRIEG	Battle of ardennes	59.95
CHESSMASTER 2000	Best quality 3d chess ever	49.95
HARPOON	Submarine simulation wartime	59.95
HARPOON BATTLESET 2	North Atlantic convoy	49.95
HOYLES GAMES 2	More great card games	69.95
IMPERIUM	Very heavy sci-fi galactic power	49.95
M1 TANK PLATOON	Quality 3d tank simulation	89.95
OVER RUN	Military war game	49.95
OPERATION HARRIER	Airport war strategy	59.95
POWER MONGER	Awesome 3D global control game	59.95
SECOND FRONT	War game	59.95
SIMULCRA	3D sci-fi strategy game	49.95
STORM ACROSS EUROPE	War gaming strategy	49.95
SUPREMACY	Sci-Fi EPIC Role Playing	69.95
TEAM SUZUKI	3D motorcycle racing action	59.95
TEAM YANKEE	Excellent 3d tank simulation	84.95
TRUMP CASTLE	Gambling compilation	49.95
ULTIMA 5	Heavy d&d strategy	79.95
UMS 2	Follow up to strategy great	79.95
WOLFPACK	Submarine simulation	79.95
WHITE DEATH	Strategy on the russian front	59.95

SPORTS

AMIGA CRICKET	Excellent game needs 1 meg	49.95
PRO TENNIS	Best tennis game seen	49.95
TV SPORTS FOOTBALL	Enjoy gridiron ?? get this	69.95
TV SPORTS BASKETBALL	Best sports hit game	69.95
KICK OFF 2	Still the best soccer game	59.95
HARDBALL 2	Baseball skills are tested here!	59.95
INTERNATIONAL SOCCER	Excellent 3D soccer classic forever	59.95
Jack Nicolas Course Design	Fantastic 3D golf and course maker	79.95
TOURNAMENT GOLF	Arcade style golf game	59.95
WINNERS ITALY 1990	Soccer fans go for it!	49.95
World Championship Soccer	New soccer game	69.95
WORLD CUP 90 SOCCER	More soccer fun	49.95
ULTIMATE GOLF	Golfing great!	59.95

BUSINESS & HOME

ADVANTAGE	Powerful high speed spreadsheet	299.00
DAY BY DAY	Home planner package	59.95
DG CALC	Quality spreadsheet	99.95
EASY LEDGERS	Accounts payable & receivable	399.00
ELECTRIC THESAURUS	On-Line multi-tasking excellent!	69.95
EXCELLENCE 2.0	Professional wordprocessor	299.00
GOLD DICK OFFICE	Complete Database/Sp/SH/graphics	399.00
KIND WORDS	Word processing package + dictionary	99.95
MAILSHOT PLUS	Mailing label processing package	69.95
MAXIPLAN PLUS	Top spreadsheet	199.00
PAGE STREAM 2.1	Quality desktop publishing	399.00
PAGE STREAM FONTS	Additional fonts	59.95
PROFESSIONAL PAGE 1.3	Quality dtp package	299.00
PROWRITE 3.0	Wordpro with colour & graphics	219.00
SCRIBBLE PLATINUM	High speed quality word processor	129.95
SUPERBASE PERSONEL 2	Excellent Database package	139.95
SUPERBASE PROFESSIONAL	Fully programmable database	299.00
SYSTEM 3	Excellent business pack, call	129.95
SYSTEM 3 E	New executive version of above	159.95

TRANSWRITE	Quality word processing system.	99.95
WORD PERFECT	The ultimate word processor	499.00
WORKS PLATINUM	Improved WP/ Sp/SH/ Dbe	229.95
DESKTOP BUDGET	Home finance controller	99.95
HOME ACCOUNTS	Balance visa/board and the gas bill	89.95
PAGESSETTER II	Beginners dtp package	179.95

EDUCATIONAL

BEGINNING GERMAN	Sprechen sie deutsch	89.95
DUCK TALES	Great fun for the kids	59.95
DECIMAL DUNGEON	Educational junior high 5th	69.95
DISCOVERY MATHS	Educational fun	39.95
DISCOVERY SPELLING	Educational fun	39.95
DINOSAUR DISCOVERY KIT	Learning prehistoric world	54.95
FUNTSCHOOL 8-up	Educational collection	49.95
FUNTSCHOOL 2-5 (3)	Educational collection	49.95
FUNTSCHOOL 5-7 (3)	Educational collection	49.95
KID TALK	Quality sentence learning	49.95
INTELLITYPE	Learn to touch type on computer	139.95
LOGO AMIGA	Educational programming skills	49.95
MATH BLASTER PLUS	Great learning fun for all	69.95
MATH TALK	Quality maths learning 5 to 10yr	49.95
Mavis Beacon Teaches Typing	#1 Typing tutor all ages	69.95
MICRO FRENCH 1 & 2	Learn French	54.95
PRIMARY MATHS	Education Series	54.95
READ & RHYME	Educational 5 to 10 yr olds	69.95
READ A RAMA	Reading program	69.95
SIM CITY	Design and maintain model city	69.95
SPELLER BEE	Learning words	49.95
SPEED READ	Quality training package	99.95
WHERE IN EUROPE CARMEN	Geography adventure	84.95
WHERE IN USA CARMEN	Geography educational game	84.95
WHERE IN WORLD CARMEN	Geography educational game	84.95
WHERE IN TIME CARMEN	Latest release in the series	84.95
WORLD ATLAS	Unique computerized world atlas	89.95

MUSIC

Bars & Pipes	Professional midi sequencer	349.00
Deluxe Music Construction Set	Composition editor	99.95
Music X	Quality midi & editing tool	299.00
Sonix	Music editor	149.95
Harmoni 24	track MIDI sequencer	149.95

HARDWARE

40 Mb SCSI II Drive Quantum	Voice-coll, auto-park, 11-18ms	749.00
8UP Memory Board 2Mb Ram	A2000 ram exp board	699.00
A2010 Internal Drive	A2000 internal drive	199.00
Accelerator GVP A3001 4MB	68030, 4Mg 32 bit ram, 82co-pro 28mhz	2695.00
Action Replay MK2	New version for A500 and A2000!	249.00
ADRAM 540 0K INSTALLED	Expandable to 4 meg for the a500	269.00
Amiga A590 20MB Hard Drive	Suits amiga 500 2meg ram options	899.00
COMIDI AMIGA	Quality amiga midi	179.95
COMIDI POCKET MIDI	Budget midi interface	109.95
COMPUTER AMIGA 500	Powerful home computer	799.00
AMIGA 500 STARTER PACK	Inc tv modulator & software	899.00
DELUXE KIT AMIGA 500	1 Meg a500 + heaps of software	1099.00
AMIGA 2000	Latest model, we love it!	1669.00
AMIGA 2000 PRO	With extra \$1000 in software	1769.00
AMIGA 2000HD (40MBHD)	40 Meg drive factory fitted!	2395.00
AMIGA 2000HD PRO	With 40 Meg drive and software	2495.00
AMIGA 3000 25MHZ	The stuff that dreams are made of	5695.00
Golden Image Optical Mouse	Extremely reliable Amiga mouse	139.95
KCS Power Board A500	lbm emulator for your a500 amiga	799.00
Monitor CBM 1084S	Stereo, suits amiga atari c64 & PC	449.00
Rotect Amiga Mouse	The best amiga mouse!!	49.95
PC Emulator Bridge Board AT	Inc. 5.25" 1.2 meg drive	799.00
Philips Monitor (CM8833)	Stereo, 2 yrs warranty!	489.00
STAR NX 1000C	Colour 9 pin. Feature packed	399.00
CITIZEN GX 200	Colour 9 pin. Great performance	499.00
CITIZEN 140 GX	Colour 24 pin. Feature packed	799.00
EPSON LQ 400	Black 24 pin. Superb print	599.00
CBM MPS 1230	Budget 9 pin.	299.00
RAM CHIPS A590/ADRAM	PER MEG	149.95
Rotect Genlock	Unbelievable value. IT'S HOT	299.00
RF302C AMIGA DISK DRIVE	Slim external drive on/off switch	149.00
Trumpcard Professional A2000	Top speed performance scsi interface	499.00
SCANNER 4" hand held	Cameron type 10 suits A500 only	699.00
Scanner Golden Image	400 DPI suits all Amigas	399.00
Digiview PAL V4.0	Best quality still digitizer	299.00
Vidi Amiga	Frame grabber pal with vidichrome	499.00
Modem Atek 124	Auto everything quality high speed	399.00





There's a Spot near you!

SEGA

PC SOFTWARE & HARDWARE • C64 SOFTWARE & HARDWARE

PC SOFTWARE & HARDWARE

ART, GRAPHICS, UTILITIES, BUSINESS & HOME

BANNERMANIA	Signs, banners etc...	69.95
DELUXE PAINT ANIMATION	Animation for your pc	99.95
DELUXE PAINT 2 ENHANCED	Best graphic editor/colour printing	99.95
GREMLINS PRINT KIT 2	Fun printing package for kids	29.95
LABELS UNLIMITED	Quality Label printing package	89.95
NEWSROOM	Home desk top publishing	49.95
PRINT POWER	Print cards & banners	29.95
PRINT SHOP	Print cards banners signs...	99.95
MENU MAKER	Excellent menu designer package	49.95
Ninja Turtles Colour Book	Great fun for the kids	49.95
MAILSHOT PLUS	Mailing database system	109.95
SUPERCOMM	Quality communications package	119.95
6 Week Cholesterol Cure	Book and software Quality package	59.95
ATTACHE 4	Accounting package	899.00
DATA MANAGER	Simple quality database	59.95
DG CALC	Pc spreadsheet	89.95
FIRST CHOICE	Quality 3 in 1 business package	249.95
ON BALANCE	Cash book	89.95
PUBLISH IT 1.2	Quality desk top publishing	349.95
PUBLISH IT LITE	Budget clip package	99.95
PROFESSIONAL PLAN	Superb quality spreadsheet	169.95
SWIFTCALC	Quality spreadsheet	59.95
SYSTEM 3	Quality business pack, call	129.95
WORD WRITER	Quality word processor	79.95

ARCADE & ADVENTURE

ALTERED BEAST	Classic arcade game	59.95
ATP 2	Sc-Fi 3D action game	69.95
BACK TO THE FUTURE 2	ArCADE game of the movie	69.95
BATTLE TECH 2	Present hawks revenge	69.95
BANDIT KINGS	Role playing adventure	99.95
BUCK ROGERS	Fantastic adventure fun	69.95
DOUBLE DRAGON 2	Hot arcade smash em up I	59.95
EL VIRA	Adventure game horror fun	89.95
INDIANAPOLIS 500	Best 3d car racing seen!	59.95
It Came From The Desert	Excellent cinemaware horror movie	59.95
FOUNTAIN OF DREAMS	Fantasy adventure	54.95
GENGHIS KHAN	Excellent oriental strategy game	99.95
JONES IN THE FAST LANE	Yuppie Adventure Sierra Hit	69.95
LAST NINJA 2	3D ninja fighting classic	59.95
PUNISHER	Hot new release	89.95
STREET ROD	Buy it, build it up, n' race it!	54.95
Teenage Mutant Ninja Turtles	Suck on the pizza dudes!	69.95
TEST DRIVE 3	VGA 256 colour car driving game	69.95
CENTURION	Relive the days of the romans	59.95
CHAMPIONS OF KRYNN	Role playing hit	54.95
CODENAME ICEMAN	Sierra secret agent adventure	69.95
COLONELS BEQUEST	Sierra epic adventure game	69.95
CONQUEST OF CAMELOT	Sierra medieval quest	69.95
COUNT DOWN	VGA adventure spectacular	69.95
KINGS QUEST 5	Epic sierra adventure in VGA	99.95
KINGS QUEST TRIPLE PACK	1,2,3 Of the series	84.95
LARRY TRIPLE PACK	Leisure suit Larry 1,2 and 3	89.95
LEGEND OF FAERGHAIL	NEW ADVENTURE QUEST	69.95
MECH WARRIOR	It's back! Sc-Fi role playing epic	69.95
MEGATRAVELLER	The no.1 sc-fi role playing hit!	109.95
MONTY PYTHON	Classic madcap arcade madness	69.95
MICROPROSE COMPILATION	GunsHIP / SilentService / Airbourne	59.95
MIGHT & MAGIC 2	Voted no.1 adventure role playing	54.95
NIGHT BREED	Excellent horror adventure	69.95
NASCAR CHALLENGE	US NASCAR racing	69.95
NOBUNGAS AMBITION	Deep asian historic adventure epic	99.95
NOBUNGAS AMBITION2	Great sequel strategy	99.95
OPERATION STEALTH	Secret agent adventure hit	59.95
PUNISHER	ArCADE super hero fun!	79.95
QUEST FOR GLORY 2	Sierra Hit new adventure	79.95
RISE OF THE DRAGON	VGA 256 cult adventure game	79.95
RANX	Futuristic adventure	59.95
SECRET SILVER BLADES	More d&d role playing	54.95
SEARCH FOR THE KING	Elvis mystery adventure	69.95
SIERRA STARTER PACK	Space Quest / Larry / Police Quest	79.95
STELLAR 7	Fantastic ArCADE game supports VGA	69.95
STAR CONTROL	Deep Sc-Fi adventure strategy game	69.95
SUPER OFF ROAD	Hot new car racing fun	59.95
TRANSLYVANIA 3	Horror adventure	79.95
THEXDER 2 FIREHAWKS	ArCADE smash hit	79.95
ULTIMA 6	Epic role playing hit	84.95
WING COMMANDER	256 colour space simulator	89.95

SPORTS

3D POOL	3 dimensional pool game	69.95
Jack Nicklaus Golf Designer	Golf simulator fantastic	69.95
ITALY 1990	Soccer mania	59.95
INTERNATIONAL SOCCER	Wow more soccer madness excellent!	69.95
HARDBALL 2	Great baseball hit game	59.95
LINX GOLF	VGA 256 the best golf	69.95
LAKERS VS CELTICS	Basketball at the top!	54.95
TV SPORTS BASKETBALL	Best selling sports hit!	79.95
TV SPORTS FOOTBALL	Best selling sports hit!	59.95
PRO TENNIS	Hanging in there sells well	59.95
PGA TOUR GOLF	Fantastic golf fun!	99.95
World Class Leaderboard	Classic quality 3D golf	59.95

STRATEGY & SIMULATIONS

ACTION STATIONS	WWII naval simulation	79.95
BATTLE CHESS 2	Oriental chess 3d animated	69.95
BLITZKRIEG	Battle of Ardenne	79.95
BLUE MAX	WW2 Bi-plane heroes	69.95
F15 STRIKE EAGLE 2	Air combat mission simulator	69.95
F19 STEALTH FIGHTER	Complex fighter plane simulator	109.95
FIGHTER BOMBER	Voted #1 combat simulator	59.95
FLIGHT OF INTRUDER	Top quality fighter plane simulator	69.95
GALLEONS OF GLORY	Battles at sea	79.95
KNIGHTS OF THE SKY	Microprose WWI simulation	89.95
RAILROAD TYCOON	The ultimate business simulation	109.95
SIM EARTH	Create your own planet	79.95
SILENT SERVICE II	Submarine simulator	79.95
A10 TANK KILLER	Tank attack aircraft simulator	69.95
COVERT ACTION	War strategy	79.95
CURSE OF AZURE BONDS	Role playing adventure	54.95
DAS BOOT	World war 2 submarine simulation	69.95
HOYLES GAMES 2	More excellent card games	69.95
JET FIGHTER	High speed combat simulator	69.95
LIFE DEATH 2	Your chance to be a brain surgeon	59.95
M1 TANK PLATOON	War simulator	89.95
NOBUNGAS AMBITION	Deep strategy game ancient Japan	89.95
MID WINTER	3D strategy game of the future	89.95
MIG-29	Soviet light simulator	79.95
PANZER BATTLES	War game from SSI	49.95
RED BARON	WWI flying simulation	79.95
SECOND FRONT	War time russian strategy	69.95
STRATEGY	Strategy boardgame	69.95
STORMOVIK	Russian fighter combat game	59.95
TEAM YANKEE	3D high quality combat game	89.95
TEST DRIVE 3	Excellent on VGA	69.95
THEIR FINEST HOUR	Brilliant 3d air combat game	69.95
WHITE DEATH	Strategy on russian front	79.95
WOLFPACK	WW2 sea combat submarine game	89.95

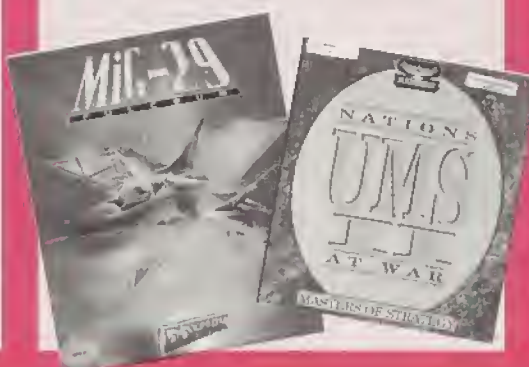
EDUCATIONAL

DUCK TALES	Educational	59.95
FIRST WRITER	Early word processing skills	29.95
FUNSCCHOOL 2-6	Educational fun	49.95
FUNSCCHOOL 6-8	Educational fun	49.95
FUNSCCHOOL 8-UP	Learning skills	49.95
MATH BLASTER PLUS	Quality maths package	69.95
Mavis Beacon Teaches Typing	Typing tutor	69.95
MICKEY ABC	Early educational	69.95
MICKEY SHAPES	Early educational	69.95
MICKEY MATHE	Early educational	69.95
PLAYROOM	Early learning fun & games	79.95
SIM CITY	Design & control a city	89.95
SPELL IT PLUS	Quality education package	69.95
WHEEL OF FORTUNE 2	Great family home game	39.95
Where In Europe Is Carmen	Geography game	84.95
WHERE IN TIME CARMEN	Teaches history & geography	84.95
WHERE IN USA CARMEN	Geography game	84.95
WHERE IN WORLD CARMEN	Geography game	84.95
WORLD ATLAS	Atlas on computer, fantastic!	89.95

HARDWARE

ADLIB SOUND CARD	The original sound card	239.00
PC COLT	Twin 5.25" XT computer	699.00
PC 10 series III	Single 5.25" 40 meg HD XT computer	1495.00
PC 40 ser III VGA	AT 286.1 meg ram, 40 meg HD inc	1995.00
CGA MONITOR	4 colour PC monitor	449.00
EGA MONITOR	16 colour HI-RES PC monitor + card	699.00
VGA MONITOR	256 colour HI-RES PC monitor + card	999.00
IBM GAME CARD	Required for PC joystick	39.95
JOYSTICK ANALOG PLUS IBM	Quality joystick	59.95
JOYSTICK ANALOG EXTRA	Superior PC joystick	69.95
JOYSTICK PC	Budget PC joystick	29.95
SOUND BLASTER CARD	Magnificent PC sound add-on!	349.00
LIGHTSCAN 200J SCANNER	Handheld scanner 200DPI	199.00
LIGHTSCAN 400H SCANNER	Handheld 400DPI with OCR	369.00
GENIUS PC MOUSE GM-6X	Microsoft compatible 3 button	79.95
GENIUS PC MOUSE GM-F302	As above inc Graphic Art software	139.00
GENIUS PC MOUSE GM-F303	As above inc CAD software	159.00

PRINTERS:
SEE PRINTERS UNDER AMIGA HARDWARE all compatible to PC!



C64 SOFTWARE & HARDWARE

ART & UTILITIES

AWARD WARE	Create & print own awards	29.95
PRINT POWER	Signs, calendars, banners	29.95
PRINT SHOP	Print signs, cards, banners	79.95
DATA MANAGER	Quality database package	39.95
KWIK WRITE	Budget word processor	29.95
MINI OFFICE 2	Wordpro/ibase/spreadsheet/comms	44.95
NEWSROOM	Desk top publishing package	39.95
PAPERCLIP PUBLISHER	Desk top publishing	54.95
SWIFTCALC	Fully featured spreadsheet	39.95
TOP 20 SOFTWARE TOOLS	Great collection of classic utilities	39.95
WORD WRITER 5	Promising word processor	69.95
ACTION REPLAY MK6	Hacker utility cartridge	134.95
FAST LOAD CARTRIDGE	Limited stocks	49.95
EXPERT CARTRIDGE	Utility cartridge	149.95
TURBOLOAD FASTLOAD	Fastloader cartridge with reset	49.95

ARCADE & ADVENTURE

ATOMIC ROBOKID	ArCADE smash hit	39.95
BACK TO FUTURE 2	Great game of the movie	39.95
BUCK ROGERS	Comic book classic adventure	39.95
CASTLEVANIA	ArCADE adventure	39.95
DAYS OF THUNDER	Tom Cruise car action	49.95
DOUBLE DRAGON 2	ArCADE smash hit	39.95
DRAGON NINJA	Kung fu action game	39.95
E SWAT	ArCADE action hit game	39.95
GHOULS & GHOSTS	Quality arCADE conversion	39.95
GOLDEN AXE	ArCADE smash hit	39.95
FLIMBOS QUEST	ArCADE smash hit	34.95
KINGS BOUNTY	Adventure quest	39.95
NINJA REMIX	New release of Last ninja	39.95
ROBOCOP 2	Hit movie based arCADE game	49.95
SHADOW WARRIOR	Kung fu hit arCADE	39.95
STAR WARS TRILOGY	All 3 star wars games	39.95
STREET ROD	Buy it, build it up, n' race it!	44.95
TURRICAN	The best shoot-em up available!	39.95
WHEELS OF FIRE	Top collection of racing car hits!	39.95
Wonder Boy In Monster Land	ArCADE smash hit	39.95
BARDS TALE 1 & 2 & 3	Role playing adventure	59.95
PIRATES	Classic role playing epic voyage	49.95
CHAMPIONS OF KRYNN	Role playing hit	49.95
MONTY PYTHON	ArCADE madness	39.95
MIGHT & MAGIC 2	Excellent role playing game	44.95
SECRET SILVER BLADES	Great new role playing hit!	39.95
STRIDER 2	ArCADE smash hit	59.95
SUPER OFF ROAD RACING	3D over head racing	39.95
Teenage Mutant Ninja Turtles	Finally it's here!!!!	39.95
TOTAL RECALL	Movie hit game	49.95
ULTIMA 6	NEW! Classic role playing	84.95

SPORTS

ALL STAR TEST CRICKET	New cricket game	39.95
BLADES OF STEEL	Ice hockey action	39.95
JACK NICKLAUS GOLF	Great golf game	39.95
INTERNATIONAL SOCCER	Excellent classic hit!	29.95
JORDAN V BIRD	One on one basketball	29.95
ITALY 1990	Soccer mania	39.95
TV SPORTS FOOTBALL	3D sports game	49.95
WINNERS ITALY 1990	Soccer at it's best!	39.95
PRO TENNIS	Still the best tennis game	39.95
WORLD CUP 90 SOCCER	Excellent sports fun	39.95
ULTIMATE GOLF	New golf release	49.95

STRATEGY & SIMULATION

BATTLE CHESS	3D animated chess fun	39.95
CHESSMASTER 2100	Latest chess game	49.95
CARRIERS AT WAR	Back at last the deepest simulator	39.95
PANZER BATTLES	Strategic tank battles	39.95
REACH FOR STARS	Classic space strategy	39.95
STORM ACROSS EUROPE	Strategic wargame	34.95
ULTIMA 5	Ultimate role playing game	59.95
ULTIMA TRILOGY	Ultima 1,2 & 3 pack	69.95
VEGAS GAMBLER	Gambling hits	44.95
FERRARI FORMULA 1	Quality racing game	39.95
F16 COMBAT PILOT	Combat flight simulator	49.95
F18 HORNET	Nice Air combat game	49.95
FIGHTER BOMBER	Voted best game, combat simulator	39.95
HUNT FOR RED OCTOBER	Submarine simulator	39.95
PROJECT STEALTH FIGHTER	Air-combat simulator	49.95
RED STORM RISING	Submarine combat simulator	49.95
SUBBUTOE	Table soccer simulator	39.95
U N SQUADRON	War simulation	39.95

EDUCATION

FAMILY FEUD	Family word game	29.95
FUNSCCHOOL	2-6 Early learning skills	24.95
FUNSCCHOOL	6-8 Educational fun	24.95
FUNSCCHOOL	8-UP Learning is fun at home!	24.95
MATH BLASTER	Early learning game	59.95
Mavis Beacon Teaches Typing	Best typing tutor	49.95
SIM CITY	Build, govern your own city!	59.95
SPELL IT	Early learning skills	59.95
TYPE	Quality typing tutor	39.95

MAIL ORDER

TOLL FREE (008) 252 130

FOR ORDERS ONLY

PHONE (02) 638 2897

After something special?

If it's not here, we can chase it for you.

Computer
Spot



C64 SOFTWARE & HARDWARE • GAMEBOY • SEGA

WHEEL OF FORTUNE	Family word game	29.95
Where in Europe is Carman	Geography game	69.95
WHERE IN USA IS CARMEN	Geography game	69.95
WHERE IN WORLD CARMEN	Geography game	69.95

HARDWARE

1541 DISK DRIVE	For the commodore 64	299.00
ACTION REPLAY MK6	Hacker utility cartridge	134.95
C64 TEST PILOT PACK	C64 computer, disk drive, games	499.00
CABLE RF C64	Connect C64 to TV	14.95
CABLE SERIAL 1.5M C64	Suits disk drives/ printers etc	9.95
DATASETTE	Budget storage for C64	49.95
DISK NOTCHER	Double disk storage	14.95
POWER SUPPLY C64	Replacement power supply	54.95
PRINTER MPS1230	9 Pin, suit C64 serial + PC	299.00
Xetec Junior Interface	Allows use of parallel printer on C64	129.00

GAMEBOY HARDWARE

GAMEBOY	Take your games anywhere	149.00
ILLUMINATOR	Play in the dark	49.95
PROTECTOR	Case, holds gameboy + 7 games	39.95
AUTO POWER	Plug into car cigarette lighter	29.95

GAMEBOY SOFTWARE

ALLEYWAY	Blockout	39.95
BURAI FIGHTER	Space harrier type action	59.95
CATRAP	Challenging arcade fun	49.95
CASTLEVANIA	ArCADE adventure	49.95
CHESSMASTER	Can you beat this?	69.95
CHASE HQ	ArCADE car chase	69.95
DEAD HEAT SCRAMBLE	4X4 Off road racing	69.95
FIRST FANTASY	Adventure role play	69.95
FIST OF NORTH STAR	Martial arts	49.95
FUJUL	ArCADE puzzle	49.95
GOLF	Mario goes for par	39.95
HARMONY	Brainteasing puzzle action	49.95
MOTOCROSS MANIACS	Motocross action	49.95
NEMESIS	Shoot em up	49.95
NFL FOOTBALL	American football	49.95
OPERATION C	Excellent arcade action	59.95
POWER RACER	ArCADE racing action	59.95
QUARTH	ArCADE puzzle	49.95
QUIX	ArCADE classic	39.95
SERPENT	ArCADE lail	49.95
SKATE OR DIE	Skateboard action	59.95
Super Mario Land	All time favourite	39.95
Teenage Mutant Ninja Turtles	NEW RELEASE!!	69.95
TENNIS	Anyone for doubles	39.95

SEGA MEGADRIVE

HARDWARE

SEGA MEGA DRIVE	Ultimate 16 bit arcade console	339.00
POWER BASE CONVERTER	Use sega master system games	79.95
MEGA DRIVE CONTROLLER	Extra standard controller unit	29.95
MEGA CONTROL STICK	ArCADE joystick	89.95

SOFTWARE

AFTER BURNER II	Jet fighter action	79.95
Alex Kid The Enchanted Castle	ArCADE smash hit	59.95
BATTLE SQUADRON	Space shoot em up	79.95
BURNING FORCE	so-fi motobike action	79.95
BUDOKHAN	Samurai action	79.95
COLUMNS	new release	59.95
CYBERBALL	futuristic sports hit	69.95
DYNAMIC DUX	arCADE action hit game	79.95
E SWAT	police shoot em up	69.95
FORGOTTEN WORLDS	shoot em up	69.95
GHOST BUSTERS	who ya gonna call ?	69.95
GHOULS & GHOSTS	just like the arcade machine!	89.95
GOLDEN AXE	best version ever seen !	79.95
GOLF	sports fun	69.95
HERZOG ZWEI	new release, Shoot em up	69.95
LAST BATTLE	ArCADE action	69.95
MYSTIC DEFENDER	Are em up	69.95
PHILLOS	Fantasy arcade adventure	79.95
POPULOUS	Strategy simulation	79.95
PHANTASY STAR II	role playing adventure	99.95
RAMEO III	machine gun mania	59.95
SPACE HARRIER II	3D arcade shoot the lot!	79.95
SUPER HANG ON	high speed bike racing WOW!	79.95
SUPER LEAGUE BASEBALL	quality sports hit	69.95
SUPER THUNDERBLADE	helicopter arcade hit	79.95
SWORD OF VERMILLION	new release	99.95
SUPER MONACO GP	car racing super fun!	79.95
REVENGE OF SHINOBI	martial arts hit	69.95
TWIN HAWK	new release	69.95
THUNDERFORCE II	shoot em up	79.95
TRUXTON	new release	69.95
World Cup Italia 90 Soccer	Soccer game fun	69.95
ZOOM	classic arcade puzzle game	59.95
ZANY GOLF	Classic golf put put	79.95

Hotline
0055 20511

"There's a Spot
near you"

BRISBANE

225 George Street
Brisbane, QLD 4000
Phone (07) 229 8011

LIVERPOOL

Shop 4, Westfield
Shopping T'n Macquarie St.
Liverpool, NSW 2170
Phone 601 7700

BURWOOD

185 Burwood Road
Burwood, NSW 2134
Phone 744 8809

NEWCASTLE

80 Pacific Highway
Charlestown, NSW 2290
Phone (049) 42 1522

CHATSWOOD

Shop G9, The Gallery
Endeavour Street
Chatswood, 2067
Phone 419 2333

PARRAMATTA

Shop 21a, Greenway Arc.,
222 Church Street
Parramatta, NSW 2150
Phone 891 1170

CITY

165 Castlereagh Street
Sydney, NSW 2000
Phone 261 4344

PENRITH

Shop 1, Carvan Arcadr
389 High Street
Penrith, NSW 2750
Phone (047) 32 3377

HURSTVILLE

185E Forest Road
Hurstville, NSW 2200
Phone 570 7333

MAIL ORDER FORM

Send to: Micro Computer Spot. Unit 3, Metro Centre. 38-46 South St. Rydalmere. NSW 2116

PRODUCT / PROGRAM NAME	COMPUTER	DISK TYPE	QUANTITY	PRICE

SUB-TOTAL

POSTAGE

TOTAL

☐ Tick here for your FREE regular issues of Chip Chat magazine.

Delivery Details

Name

Address

Telephone

For software only, add \$3 for post or \$15 for courier. For hardware call to arrange.
We will exercise all reasonable care in the processing of your orders but we accept no
responsibility for orders, monies or products lost or delayed in transit. Your order will normally be
processed within 48 hours, but please allow 14 working days for the fulfilment of orders. Telephone
orders are, of course, welcome.

Whenever possible, please supply a phone number where contact can be made within normal
working hours. **PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.**

DO NOT SEND CASH.

When paying by cheque please supply your home address and home telephone number together
with normal working hours telephone number.

Payment Details

Cheque ☐ Postal order ☐

Bankcard ☐ Master Card ☐

Credit card no

Valid from / / to / /

Name on card

Signature

MEMORY EXPANSION PRICES at April 15th

1MB x 1 - 100ns	DIP	DIP	\$6.10
- 80ns	DIP	DIP	\$7.30
4x256 - 100ns	DIP	DIP	\$7.00
- 80ns	DIP	DIP	\$7.45
41256 - 120ns	DIP	DIP	\$1.80
- 100ns	DIP	DIP	\$2.00
1MBx4 (44C1000) 80ns	A3000	ZIP	\$40.00
1MBx4 (44C1002) 80ns	col static	ZIP	\$46.00
1MBx8 - 100ns	simms	(G.V.P. Hard Drive)	\$56.00
x8 - 80ns	simms		\$68.00
1MBx9 - 100ns	simms		\$62.00
- 80ns	simms		\$73.00
4MBx9 - 80ns	simms		\$330.00

All types of DRAM & memory modules in stock
Please phone for the latest prices. Sales tax 20%.

Overnight delivery, credit cards welcome.

1st floor, 100 Yarrara Rd, Pennant Hills 2120

PO Box 382, Pennant Hills 2120

pelham PTY LTD

Tel: (02) 980 6988 Fax: (02) 980 6991

subscription fee. Most people find it too expensive. For more information call 008 028 339.

Readers letters

FAX MODEM?

Malcolm Moy of Chittaway Bay NSW wrote in asking: "Is it really true, that it is possible to send and receive faxes with a modem and printer?"

Yes, this is true! There is a fax program for the Amiga floating around on many BBS's. Unfortunately it doesn't include instructions and no one has been able to make it work fully.

You could also try a Fax/Modem such as the 'Maestro 9600 XR Datafax' which is a 1200/2400 modem and a 9600 fax machine in one. It is fully Hayes AT command set compatible and has auto dial, auto answer, auto disconnect. The cost is \$399 which is less than most modems alone - it is available from Direct Access Computer Products (were called Micro-Educational) in Newcastle on 008 025 229. Sounds great, but there's no Amiga software to support the

fax side yet.

However, in the U.S.A. there are several fax modems for the Amiga. When they turn up here we'll let you know.

Call for Sysops

Any SysOps who would like their BBS reviewed - you can contact me at the address below or at my BBS. I would be happy to review your BBS if requested.

What's happening next month?? I will explain those 'AT' commands in more detail (so you actually know what they mean instead of just a list) and much much more. If you have any questions or comments, I can be contacted at:

Jonathan Scowen

PO Box 162

Epping NSW 2121

Call my BBS: ALL AMIGA BBS! (02)876-8965

Until next month, happy BBSing....

Desktop Utilities

PO Box 3053, Manuka, ACT 2603

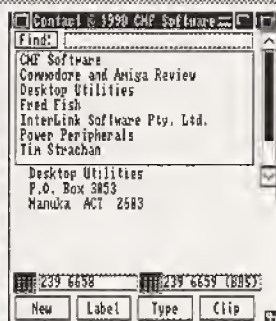
Phone: Canberra (06) 239 6658

BBS: 239 6659 Fax: 239 6619

PostDriver



The Preferences driver for Postscript devices. Send your output from any program straight to the PostScript printer - you won't need IIP emulation again! \$99.



Contact 1.2 \$59

New version!

The personal contacts manager/database for the Amiga. Now with even more features than before, e.g.

- Resizable window
- Autosave and autosort
- Includes CalcKey, popular memory-resident calculator
- Selectable data files
- Audio tone dialling

"It's functional, solid, powerful and compact."

- Professional Amiga User

"I am most impressed by the degree of integration...with the Amiga's powerful operating system." - Amiga User International

"...very clear use of the Amiga environment." - Your Computer.

PROFESSIONAL CLIPART



Professional Clipart 1

\$49 RRP

Structured clips
For ProPage, ProDraw,
& PageStream 2.1
Includes Australian
themes.



The Australian Maths practice program for grades K-6. Three skill levels. Graphics and sound feature popular Australian animals. \$39

AMIGA BUREAU SERVICES

SOFTWARE DISTRIBUTION

SCANNING SERVICE

LASER PRINTING

COLOUR INKJET PRINTING

FILE CONVERSION

SHARP SCANNERS & COLOUR INKJET

e.g. JX100 Use with Scanlab 100 on any 1MB Amiga

Bundled price with software \$1495

JX730 Colour Inkjet \$3995 with Amiga driver.

Now available:

CanDo (from INOVAtronics)

Object-oriented programming

CanDo Intro Pack and CanDo ProPower Pack

Examples and help with CanDo programming

Power Windows

Window prototyping package for programmers

Call your dealer for prices

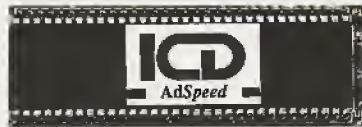
Flicker Free Video™

With Flicker Free Video (FFV) and a standard VGA or multi-frequency monitor, any Amiga® 500, 1000 or 2000 computer can produce a high quality display, free of interlace flicker and visible scan lines. Installation requires no soldering or advanced technical knowledge and frees the video slot in Amiga 2000 computers for other uses. FFV is compatible with all software, works in low and high resolutions interlaced or not, and has no genlock conflicts. FFV uses a multi-layer circuit board and surface-mounted components, packing a lot of power into a very small space. Both PAL and NTSC are automatically recognized and fully supported. Full overscan is supported, not just a limited overscan. Three megabits of random access memory are used to ensure compatibility and overscan screens as large as the Amiga can produce.

INTRODUCTORY OFFER \$649.00

AdSpeed™

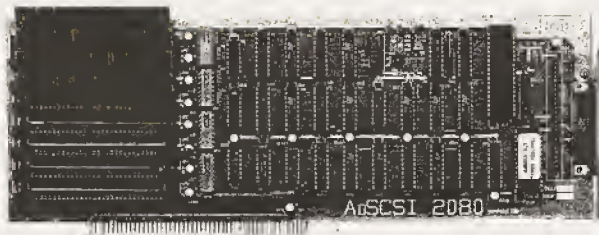
ICD expands its line of innovative enhancement products for the Amiga with the introduction of AdSpeed, a full featured 14.3 MHz 68000 accelerator for all 68000-based Amiga computers. AdSpeed differs from other accelerators by using an intelligent 16K static RAM cache to allow zero wait state execution of many operations at twice the regular speed. All programs will show improvement. AdSpeed will make your Amiga run faster than any 68000 or 68020 accelerator with on-board RAM. AdSpeed works with all 6800 based Amiga computers, including the 500, 1000, and 2000. Installation is simple and requires no soldering. AdSpeed has a software selectable true 7.16 MHz 68000 mode for 100% compatibility - your computer will run as if the stock CPU was installed. 32K of high speed static RAM is used for 16K of data/instruction cache and 16K of cache tag memory. A full read and write-through cache provides maximum speed.



\$549.00 BONUS \$50 Cashback on return of old 68000 (\$499.00)

AdSCSI™ 2080

The fastest, most versatile SCSI host adapter (hard drive interface) available for the Amiga 2000 now comes in a new configuration. AdSCSI 2080 is not DMA, but its clean design and advanced caching driver provide greater throughput than any available DMA interface. All the features you want are included at no additional charge: autoboot from Fast File System partitions, Commodore® SCSI Direct and Rigid Disk Block conformance for no mountlist editing and compatibility with third party SCSI devices, and the most advanced removable media support available, including automatic DiskChange and no partitioning restrictions. AdSCSI 2080 also includes sockets for adding two, four, six, or eight megabytes of RAM using 1 megabyte SIMMs. If expansion slots are in high demand then this card could be your answer.



**AdSCSI 2080 OK RAM + 52MB Quantum LPS HDD
BARGAIN PRICE \$999.00**

AdIDE™

AdIDE™ provides an inexpensive alternative to a full SCSI interface. Sometimes called "AT drives", IDE drives have an embedded controller and are designed for connection to an AT PC bus. Nearly all drive manufacturers are now producing these low cost units.

AdIDE uses the same advanced software supplied with our AdSCSI host adapters. It delivers incredible speed and performance in a very small package. Features include autobooting from FastFilesystem partitions, A-Max II support, and more. AdIDE/40 is for the Amiga 2000. It fits underneath the CPU chip and uses no slot. The included 40 pin cable connects it to standard 3.5 inch hard drives.

AdIDE/44 is for mounting a 2.5 inch drive inside the Amiga 500. It includes the standard 44 pin cable and drive mounting brackets.

**Price - AdIDE-40 \$260.00
AdIDE-44 \$290.00**

Flicker Free Video, FFV, AdSpeed and AdSCSI are trademarks of ICD, Inc. Commodore is a registered trademark of Commodore Electronics Limited. Amiga is a registered trademark of Commodore - Amiga, Inc.

A500 Internal Hard Disk

The smallest hard drive/interface in the world is now available for mounting inside your Amiga 500! This little sweetheart gives 20 megabytes of high speed performance yet takes absolutely no desk space. Novia 20i includes complete instructions and all the hardware necessary for a simple, clean no-solder installation.

INTRODUCTORY OFFER \$999.00

SYQUEST 44MB removable drive \$899.00

**Australian Distributor and Registered AMIGA Hardware Developer
Maxdrive Systems Pty. Ltd.**

P.O. Box 56, Darling Heights, Qld. 4350

Phone (008) 076 301 - Orders Only

Enquiries/Dealer 018 717 506. Fax: (076) 361 458

VISA - MASTERCARD - BANKCARD - CHEQUE - Accepted

The Geos Column

by Owen James

Mail-merged letters. Don't you just hate computers that make out they know you personally? Of course you do. Who can stand getting letters like:

Dear John K. Citizen,

You, John, have been selected as a lucky customer that can take advantage of our incredible discounts this month. Yes, John, so why don't you and the rest of the Citizen family come out to our warehouse and be part of this unique offer etc, etc...

They're frustrating not just because they treat you like you're a personal friend, but also because it's so darn obvious they come off a template letter yet try to pretend they don't. The problem is that they're limited in what data can be changed in each letter. Sure, you can change a name, but what if you need more control?

Enter *GeoMerge*! *GeoMerge* gives you the power that you've been longing for. With this little 'power application' you can write a mail-merge letter to twenty different friends and STILL have each one seemingly unique.

Merge gives us the 'IF' and 'ELSE' commands, which allows text to be in a letter only if certain conditions are met. Let's take an example:

If I've loaned various things to twenty of my friends and I want to write them a letter stating what they've got of mine, or a thankyou note if they've returned whatever it was, I would ordinarily have a lot of typing to do. Not so with *GeoMerge*. Here's my letter template:

```
<<title>> <<firstname>><<surname>>
<<address>>,
<<suburb>>
<<state>> <<postcode>>
```

```
Dear <<firstname>>,
Hi! How are you? What's the weather
been like at <<suburb>> recently?
<<IF returned="yes">> Thanks for re-
turning my <<mine>> so promptly. I
```

really appreciate that!

```
<<ELSE>> I think you may have mis-
takenly overlooked returning my
<<mine>>. Any chance I could get it
back soon please?<<ENDIF>>
<<IF title="Miss">> What are you do-
ing Saturday night?
<<ELSE>> Catch up with you some-
time!
```

Yours sincerely,

And here's what our database looks like:

```
title
firstname
surname
address
suburb
state
postcode
mine
returned
*
Mr.
Melvin
Bore
16 Main Rd
Nerdsville
QLD
4029
Wild World of Chess book
no
*
Miss
Cass Ette
Lot B James Rd
Katoomba
NSW
2780
Pink Floyd tape
yes
*
```

The first section of the above list is the label records. It tells *GeoMerge* what labels will be used in the document. After the asterik our data begins which will be substituted for the labels in the template document. Here's what the two sample letters would look like:

```
Mr. Melvin Bore
16 Main Rd,
```

Nerdsville
QLD 4029
Dear Melvin,

Hi! How are you? What's the weather been like at Nerdsville recently?

I think you may have overlooked returning my Wild World of Chess book. Any chance I could get it back soon please?

Catch up with you sometime!
Yours sincerely,

Miss Cass Ette
Lot B James Rd,
Katoomba
NSW 2780
Dear Cass,

Hi! How are you? What's the weather been like at Katoomba recently?

Thanks for returning my Pink Floyd tape so promptly. I really appreciate that!

What are you doing Saturday night?

Yours sincerely,

As you can see, because Melvin hasn't returned my book he receives a polite letter asking for it back (note the word POLITE here!).

And because Cass has returned my tape on time she gets a thankyou note. Notice also that Cass is a 'Miss' (Missed out?) and so we've asked about Saturday night!

So how do we go about creating a *GeoMerge* document? We need to begin by thinking about the data that we need changed between letters. Obviously names will be different in each copy, and possibly addresses also. Then we need to think about other changes. For instance you may want to ask all your friends that own a 64 whether they know a cheat for a certain game, or you may want to ask your Amiga owning friends if they have any of the latest Fish disks.

To make all these sorts of changes we use what *GeoMerge* calls 'labels'. Labels are very much like the variables you use in BASIC in that they hold certain data that can be recalled and acted upon later. See the use of labels in the above letters? The template letter uses title, firstname, surname etc. With each letter that's printed, the information in these labels will change depending on the contents of our database.

We can also control the way *GeoMerge* acts on the contents of our database. For example we could print certain lines of text only if it relates to

Continued on p38

THE HIGHEST PERFORMING SCSI AND RAM CONTROLLERS FOR THE AMIGA 2000 AND 500

SERIES II

Over 900KB/sec transfer rate on a standard AMIGA 2000. 1.5 MB/sec transfer rate with a 68030 accelerator.



MICROLAB
COMPUTER CENTRE

PH: (03) 558 9699
FAX: 558 9522

SERIES II A2000

40Q MB Hard Disk + 8M
RAM Card (0mb)

\$1,295

SERIES II A2000

40Q MB Hard Disk Card **\$1,189**

SERIES II A2000

80 MB Hard Disk Card **\$1,395**

SERIES II A500

40Q MB Hard Disk + 8MB
(0mb) RAM all in a new
slim unit

\$999

MICROBOTICS M501-S

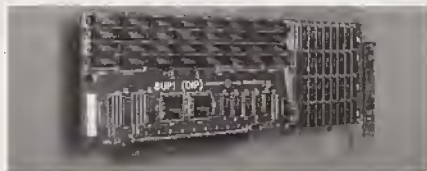


Half a Meg, Clock and Switch

- 100% compatible with the equivalent Commodore part.
- Its built-in switch allows you to shut it down without having to uninstall it when ill-behaved software expects no more than 512K in your Amiga.

\$99

MICROBOTICS 8-UP



Maximum Memory In One Slot

- Install 2,4,6 or 8 full Megabytes in one slot
- Important to BridgeCard and 2620 users who need 6MB to max their systems.
- 8-UP is a power efficient (Less then an amp) zero wait state, AUTOConfiguring design.

with 2 MB \$490

EXPANSION SYSTEMS

BASE BOARD

0-4 MB RAM expansion for the A500

- Solderless, no-modification installation.
- Compatible with all memory configurations 1/2MB and 1MB chip RAM
- Quality 4 layer PCB
- Battery backed clock/calendar

BaseBoard with 2 MB	\$485.00
---------------------	----------

BaseBoard with 2MB	\$485.00
BaseBoard with 4MB	\$685.00

DATA FLYER

A2000 HardCard SCSI controller

- Supports 7 SCSI devices
- AutoBoots under 1.3 Kickstart
- Auto install software, makes formatting and partitioning a breeze

DataFlyer with 40MB Quantum	\$980 11ms
-----------------------------	------------

DataFlyer with 100MB Quantum \$1490 11ms

DataFlyer with 170MB Quantum \$1950 9ms

DataFlyer with 80MB Seagate	\$1180 14ms
-----------------------------	-------------

12 MONTHS WARRANTY ON ALL PRODUCTS

ITEM	FORMAT	QTY	PRICE

Name: _____ Postage _____
 Address: _____ TOTAL _____
 State: _____ P/code: _____

Postage:
surface within Vic \$3.00 per item
surface outside Vic \$5.00 per item

Card type: _____

Card No:

Expiry:

Signature: _____

POST TO: PACIFIC MICROLAB, 277 ELIZABETH ST, MELBOURNE, VIC 3000

AMIGA

G E A R

Commodore
AMIGA

T SHIRTS

SWEATS

STICKERS

CAPS

POSTER

AMIGA

G E A R

PRIVATE COLLECTION

SWEAT: 100% Cotton with fleecy brushed inside. White with Amiga name on front, full colour print on the back. Washable. M/L/XL. Postpaid, each \$30.

POSTER: Classic Amiga poster printed full colour on heavy art paper. Ideal for wall or ceiling mounting. 762mm x 506mm. Comes in a tube. Postpaid, each \$5.

T's: 100% cotton baggy T shirt. White, with Amiga name on front, full colour print on back. Washable. Sizes M-L-XL. Postpaid, each \$20.

CAPS: U.S. Style peaked cap. In washable yellow cotton with Amiga insignia front. Adjusts to fit all head sizes. Postpaid, each \$12.50.

STICK IT! : New Amiga stickers. Self-adhesive vinyl. Goes on your board, bumper, case or anywhere. Postpaid, \$2.50 per set.

Now you can get into Amiga gear !

As well, you'll be helping some less fortunate kids, because 10% goes to the Autistic Association. Like the man says, only Amiga makes it possible. This is just the start - get into it !

USE THIS ORDER FORM

TO: Amiga Gear, C/- The Mailing House, P.O.Box 663, Artarmon NSW 2064.

Here's my order.

This is the Amiga Gear I want.....

Please PRINT all details clearly !

ITEM	SIZE	QTY	COST
AMIGA CAP (adjustable)	—		\$12.50
AMIGA SWEAT (M/L/XL)			\$30.00
AMIGA BAGGY T (M/L/XL)			\$20.00
AMIGA POSTER (762mm x 506mm)	—		\$5.00
AMIGA STICKER (297mm x 210mm)	—		\$2.50
(All items are postpaid)			TOTAL \$

10%
GOES TO THE
AUTISTIC ASSOCIATION

\$60
SPECIAL DEAL:

If you buy one of each (normally \$70) tick here and all you need to send us is \$60! ☐

NAME _____

ADDRESS _____

_____ P/Code _____

Payment by: ☐ Cheque ☐ MO ☐ Credit Card

CREDIT CARD DETAILS

☐ Bankcard ☐ Visa ☐ Master ☐ American Express

Card No:

Expiry Date: _____

Name of card holder: _____

Signature of card holder: _____

particular people, like if they owe you \$100, if they're single, or you might want to send sympathy if they're an Atari owner! Just use the IF-ELSE commands.

That's just one very simple use of *GeoMerge*, but it's much more versatile than that. You can actually use data from *GeoDex*, *GeoFile*, *GeoCalc*, or just about any other text based GEOS application. Using the text grabber application you could probably even use data from other programs that don't run under GEOS.

You could import figures from *GeoCalc*, match it with information from *GeoDex* or *File*, and create letters according to the result. Unfortunately the manual doesn't go into great detail about this, so a lot experimenting will be needed. Don't worry about this. Experimenting is one of the best ways to learn, and you may even find features that aren't supposed to exist.

Recently I was using *PageSetter II* on the Amiga and discovered that contrary to the manual (and what everyone else says) it does support flexible spacing in between individual characters - a powerful feature that is

normally reserved for the high-priced publishers. Experiment with the software you own and I guarantee you will learn more than any manual can ever tell you.

GeoMerge will even reformat your document according to the size of the labels. So if one of the names in your database is Georgina Poppadopolous, *GeoMerge* will wrap the words that won't fit onto a line.

Another important feature of *GeoMerge* is the ability to enter merge data manually. Great if you find you need to create a merge letter 'on the fly' and don't want to go through the procedure of adding to a database.

Do and don't tips

And now some 'do and don't' tips for all potential *GeoMerge* users:

DON'T use people's names to a ridiculous extent in a merged document. Just use them like you would if it was a normal letter.

DON'T try to pretend it isn't a merged document. Most are obvious anyway.

DO get the database right! Spelling

errors are fatal in a merged document because the words of the database are quite often used more than once. Also, if you miss parts of the database you might just end up with statements like "Could you please return my Katoomba", or worse "You're a great friend, Pink Floyd tape". Get the message?

DON'T use *GeoMerge* for every letter you write, especially if they're to close friends. Lines like "You're my best friend, <<firstname>>", really don't go down too well!

GeoTips

With the ability to use an Apple Laser printer with GEOS came special fonts to match. In case you're wondering, these laser fonts can be used without any hassle on a normal dot-matrix printer. Some people claim that the prints made with these fonts are better than the usual ones. Give them a try and see for yourself.

We all know that GEOS is heavily copy protected for a good reason, but the trouble is that sometimes there may be a genuine need to make a back up. For example, perhaps both our system disks decide to cease doing their thing because of drive head alignment problems, or we're the lucky owner of a 1581 drive and want to boot from a 3 1/2 inch disk. All these troubles could be over if you can locate a PD program by the name of *Vorpal Aid V4*.

I'd first heard about this from an American Commodore newsletter that was sent to me by Marc Walters (thanks Marc!). Evidently it's been available for a while, but does anybody know where?

One fantastic application for this program would be to make a backup of GEOS but instead of saving it to disk, putting it on an EPROM or even the Quick Brown Boxes (a battery backed memory device). Imagine it - GEOS automatically there and waiting for you with the flick of the power button. Even with saving to disk you could use faster disk turbos than GEOS provides without interfering with copy protection.

Anybody that has *Vorpal Aid V4* or knows its whereabouts would be a friend for life if they contacted me!

That's just about all that time and space permits for this month. As you can see, GeoTips are a little scarce so I want yours! Send them care of:

ACAR
PO Box 288
Gladesville 2111

The NEW EDUCATION PACK (30 Page Manual included)

STATISTICS PACK (includes Binomial & Normal Distributions, Confidence Intervals, Hypothesis Testing, T-Distribution, Chi-Square, Fisher Distribution).

MATHS PACKS (includes Graph any Function, Solve & Integrate, Least Square Curves, Navigation, Complex Numbers & Complex Number Determinants, 3D Geometry & MUCH MORE).

STAR PACK (a planetarium display of the heavens).

SCALE (your own exam marks using mean & standard deviation).

ENGLISH-FRENCH translator.

SULTAN'S PALACE (reward claimed but see separate ad for my new reward game!).

MUSIC MAKER (Type in your own songs from sheet music and hear them played).

You get THE LOT on disk for the Commodore 64 for \$29.95 from...

GARY MCCLEARY SOFTWARE
PO Box 24 Emu Plains 2750

\$1000 Reward!

(One Thousand Dollars)



I've done it again!

To the first person to solve

THE SPACE EXPLORER

on the Commodore 64/128
AN ALL GRAPHICS



ADVENTURE
IN SPACE



(winner will be
announced here)

Game is available on disk
for \$39.95 from

Gary McCleary Software

PO Box 24

Emu Plains NSW 2750

First of all, thank you to everyone who has written in to Australian Commodore and Amiga Review. Unfortunately we cannot promise to answer every letter individually, but we'll do our best. If you keep your letter reasonably short and to the point it will be published.

Letters TO THE EDITOR

We do read all letters regardless, and often the answers you're after may appear in one of our regular columns. We can answer quick questions over the phone, however we recommend you contact your local user group or software supplier for in depth problems.

Ideas to improve ACAR

I have just finished reading the January 1991 issue of ACAR, and it was most enjoyable. I feel it competes well with the majority of other Amiga and Commodore magazines which are imported into the country. Its most appealing feature of course is the price. How can it be so cheap? However I do have to make some comment on the fact that there was only one page of letters - surely there could be at least three or four. How about some sort of forum for readers to exchange hints and tips on productivity titles, not just games?

Regarding your comments on Shareware software, I think you are indeed right that you should consider any money being exchanged as payment for what you have already and you should not expect updates as a right. However, it would be quite dishonest for a programmer to keep accepting payments if they have no intention of releasing upgrades. The problems arising from this are clearly stated in this article (by Andrew Leniart).

Maybe the public domain software library companies could act as intermediary by spreading any of the programmer's correspondence amongst Amiga users and accepting the money on the programmer's behalf and then passing it on to him. In this way, the public domain distributors could pass on any updates quickly because they would have regular correspondence with the programmer. Also the distributor would know what programs were being supported by the public. This way we would know how much a programmer was making and would know when we could expect an update, or if he was making no money we could cut our losses and be happy with what we have.

Graham Rutherford
Devonport, Tas

Ed: We will try to keep letters a good size so you have plenty to read in each issue. Your idea about a forum for serious users is great - we'll look at kicking off a productivity column with a letters section in our April issue.

Regarding shareware, I think you've missed the point entirely. The whole idea of shareware is to remove the middle man and keep the price down. If public domain companies had to accept money, handle correspondence, provide support etc etc... then they would in fact be acting as

Quadrant COMPUTERS, PERTH

PD FOR THE PEOPLE

"END THE PD MEGA RIP-OFF TODAY"

NOW ONLY \$2.00
INCLUDING NASHUA DISKETTE

FISH 1-480	AMAZ	CCCC	TOPIK
AMIGAN	AMICUS	FAUG	NZ AMIGA
AMIGOZ	PHOENIX \$2.50	COMPASS	

\$2-\$3.00
17 BIT COLLECTION \$3.00
PUBLIC DOMAIN POSTAGE CHARGES
1-9 DISKS \$2.00 10-20 \$3 20-30DISKS \$5

POWER PACKER PROFESSIONAL

INCREASE STORAGE BY FORTY PERCENT.

"YOU CAN'T PUMP UP A DISK, BUT WITH POWER PACKER YOU CAN COMPRESS ITS CONTENTS INTO LESS THAN TWO THIRD THE SPACE OTHERWISE REQUIRED FOR STORAGE - ON A FLOPPY OR HARD DRIVE."
"POWER PACKER USES SOPHISTICATED "CRUNCHING" ALGORITHMS TO REDUCE THE SIZE OF FILES, ALLOWING AN AVERAGE OF 40 PERCENT MORE MATERIAL TO BE STORED ON THE MEDIUM OF YOUR CHOICE."
POWER PACKER RRP PRICE \$39.95

NEWSFLASH DISK MAGAZINE (2DISK)

"IF YOU'RE AFTER A DISK MAGAZINE WITH A DIFFERENCE, NEWSFLASH IS FOR YOU. AS WELL AS REGULAR EDITORIALS, THIS 2 DISK MAGAZINE HAS PROGRAMS, UTILITIES, CREATIVE ART, MUSIC, DEMOS, AND OTHER NOTICES. IT ALSO INCLUDES A WORLD WIDE MESSAGE BANK, A SPECIAL SERVICE FOR READERS."
NEWSFLASH DISK MAGAZINE (2 DISK) RRP PRICE \$19.95
DEALER ENQUIRIES WELCOME

YOUR SOFTWARE AND HARDWARE RESOURCE

AMIGA ACCESSORIES	AMIGA SOFTWARE	COMMODORE 64/128
4Way Joystick Adaptor \$22	3-D CONSTRUCTION KIT \$180	APROTEK CART EXPANDER \$55
ACTION REPLAY MARK II \$170	AMIGA VISION \$120	APROTEK MODEM ADAPTOR \$35
Agiler Mouse \$65	AMOS The Creator \$120	APROTEK USER PORT EXT \$22
AMAS ADV MIDI & Sampler \$235	ANIMATION STUDIO Disney \$225	GEOPRINT CABLE \$55
DIGI-VIEW GOLD V4.0 \$275	AUDIO ENGINEER \$139	FREEZE MACHINE \$55
Dr. Ts MODEL A MIDI INT \$135	BARS AND PIPES \$279	KCS POWER CARTRIDGE \$49
EASLY A500 \$750 A2000 \$850	CAN DO \$120	SUMLINE COVERS CASING \$15
FRAMEGRABBER PAL \$1199	CAN DO PRO PACK \$55	TURBOLOAS CARTRIDGE \$37
KCS POWER PC BOARD \$499	CAN DO INTRO PACK \$55	XETEC SUPER GRAPHICS JNR \$110
MINIGEN \$479	CROSS DOS V.4 \$55	XETEC SUPER GRAPHICS \$159
MOUSE MASTER \$65	CYGNUS ED V2.0 \$135	XETEC SUPER GRAPHICS GOLD \$279
RADICAL MIDI INT \$72	DISKMASTER V1.4 \$55	VSI IBM TO 64 ADAPTOR \$75
SUPERCARD AMI II \$145	DBMAN V \$359	
VIDEO BLENDER \$2250	DOS 2 DOS 0 \$59	GEOS V2.0 64 \$54
VIDI AMIGA FRAME GRABBER \$275	DR TS COPYIST APP \$110	GEOS V2.0 128 \$64
	DR TS TIGER CLUB \$139	GEOCALC 128 \$45
	DR TS LEVEL II V3.0 \$169	GEOCART 64/128 \$36
	EASYLEADERS ACCOUNTING \$370	GEODISK 64 \$36
	EXCELLENCE V2.0 \$269	GEODISK 128 \$46
	KATIES FARM or MCGEE \$399	GEOPROGRAMMER 64/128 \$36
	LATTICE C DEV SYSTEM \$175	GEOPUBLISH 64/128 \$46
	MAC 2 DOS INC INTERFACE \$59	GEOS INT FONT PK 64/128 \$36
	MAXPLAN PLUS \$185	
	MUSIC X JUNIOR \$55	AWARD MAKER PLUS \$36
	ORGANIZE (SPECIAL) \$359	BILLBOARD MAKER \$40
	PAGESTREAM V2.1 \$52	ELECTRONIC CASHBOOK \$76
	PAGESTREAM FORMS VIL 1 \$50	FAMILY TREE V2.0 (64) \$74
	PROFESSIONAL PAGE V2 \$420	FLEET FILER \$36
	PROJECT D V2.0 \$79	FLEET SYSTEM 2+ \$55
	PROWRITE V3.1 \$175	FLEET SYSTEM 4 128 \$74
	QUARTERBACK HD UTILITY \$79	MINI OFFICE II \$46
	QUARTERBACK TOOLS \$59	PRINTMASTER PLUS \$55
	QUIKWRITE \$87	PRINTSHOP \$64
	SUPERBASE PRO V4.0 \$599	SUPERBASE 64 OR 128 \$55
	WORKS PLATINUM \$175	SUPER C 64 OR 128 \$85
	X COPY PLUS \$69	SUPER PASCAL 64 OR 128 \$84
	X COPY PROFESSIONAL \$119	SUPERSCRIPT 64 OR 128 \$55
	YOUR FAMILY TREE V2.0 \$109	SWIFTCALC Inc Sideways \$30
	ZUMA FONTS V2.1 \$35	
	ZUMA FONTS SETS EACH \$59	

PRINTERS ON SPECIAL

STAR NX-100CL	\$370
STAR LC-200	\$445
STAR LC-24-200 CL	\$689
EPSON LX-400	\$270
EPSON LX-400	\$470

NEVER UNDERSED
ON
PRICE AND SERVICE

POSTAGE CHARGES

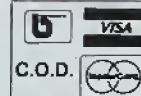
Australia Wide Courier
AIR FREIGHT
3KGS FOR \$5.00
CALL FOR SURFACE RATES

NEW EXTENSIVE
PRODUCT CATALOGUE
\$2.00 for P&P
PLEASE STATE YOUR
COMPUTER TYPE

PRICES AND SPECIFICATION SUBJECT
TO CHANGE WITHOUT NOTICE

26 Rochester Way Dianella
P.O. Box 380 Morley WA 6062
Pager (016) 983 333
Facsimile (09) 375 1113
Phone (09) 375 1933

Trading hours West Coast
8am-6pm Mon-Fri
8am-9pm Thur
8am-5pm Sat
Trading hours East Coast
10am-8pm Mon-Fri
10am-11pm Thurs
10am-7pm Sat



MAIL ORDER WELCOME

LOST

The availability of more Memory
for the Amiga 1000 or 500

FOUND

1 Meg. Auto Configuring Memory
boards, designed and manufactured
by XEL

REWARD

\$299

provides you with either -
a 1 Meg fully populated board
or, 2 x 1 Meg unpopulated boards

MEMORY SPECIAL

512K Chip Packs Rec. ret \$48.
25% Dis. applies if purchased with XEL boards

XEL Pty Ltd

G.P.O. BOX 121 Adelaide, 5001
Phone 08-2317396 or 018-824648 anytime
DEALER ENQUIRIES WELCOME

a commercial distributor. The whole business of updates and getting value for money is a complex and cloudy subject. On closer examination you'll find what is promised and delivered differs from one program to the next. Watch our public domain column for discussions of these issues.

1581 User

I am writing to you regarding a small magazine that we have set up for Commodore 1581 (3 1/2") disk drive owners. As you are aware, Commodore never saw fit to import these drives, and only one Australian dealer (HPD) saw fit to bring them in. Many more, however, have been brought back via friends and relatives, etc., and as such it is anybody's guess as to how many of these are in Australia.

A small band of West Coast 1581 users have decided to set up a Magazine as a support group for those who won this scarce drive. We aim to establish a reference of what will and won't work on a 1581. The magazine is aimed at 1581 users in particular, but may also be of interest to those with Hard Drives, or other non-1541 compatible drives. We feel that a magazine is the preferred option to a bulletin-board system, as benefit would be restricted to those with modems, and would be more costly, due to most users needing to pay STD rates to connect.

Our support is aimed directly at the 64/128 users running 1581's or other non-1541 compatible drives. Subscription is \$18 per year for 6 issues, and cheques and money orders can be sent to:

1581 User PO Box 323
Maddington WA 6109

Phil Arntzen
Editor 1581 User.

Ed: Well done, guys. We look forward to seeing your first issue.

How to market games?

I want to become a graphic artist/game designer. But after designing a couple of games, I don't know where to send them, so could you list some names and address of publishers or whatever for me, thanks.

P.S. The games are a mixture of arcade/adventure and strategy.

Dean Grubb

Ed: Try sending us a copy for starters - we may well be able to point you in the right directions.

THE BEST IN AMIGA PUBLIC DOMAIN!

Get your PD/Shareware software from the people who get it first and know it best or make it. We don't send out viruses, or single-program disks. We give away a *free Catalogue-disk with Virus-killer & tutorials*, updatable free at any time, and we have no postage charges. We know the Amiga and have supported it from the start - we've been producing Megadisc, the all-Australian disk-magazine for the Amiga since 1986. We can help when problems occur. We invented Theme Disks, and have the best. Call and find out. Toll-free. Our prices are the most competitive, and our service is immediate. Both are even better if you become a subscriber to our disk-magazine, which is unique! Try it.

OUR COLLECTIONS

Uniquely Ours:

Topik Disks

"Best of Fish" Disks

Megadisc Theme Disks - Animation,
Demos, Utilities, Graphics, and others

The Old Standards:

The AmigaLibDisks (Fish)

T.B.A.G. & AmigOz Disks

The Defunct but available:

Amicus, Amigan, F.A.U.G., C.C.C.C., etc.

MEGADISC, P. O. BOX 759, CROWS NEST 2065. TOLL-FREE: 008 227 418 ENQUIRIES: (02) 9593692 FAX: (02) 9593525. We take major credit cards by mail or phone, and we are FAST!

SCANNERS FROM \$299

The IMG printer head scanner uses fibre optics to "read" the image
- up to A4 size and is only \$299!



Available From:

Maxwells Office Equipment (Vic.) Computer
Spot (All Branches) Grace Bros., The
Gamesman, Myer, Harvey Norman, Game
Wizard, Harris Scarfe, Midi Mouse
Computers and all good computer retailers.

HAND HELD SCANNERS

Type 10: The only AMIGA Scanner (we know of) with OCR software that allows you to scan TEXT! Then use it in your word processor, desktop publishing package etc. Can easily be trained to recognise ANY font (but recognises most fonts automatically).

Type 6: You want colour, we got colour! A 4096, H.A.M. mode scanner at a believable price. The TYPE 6 HAND SCANNER can scan in a full colour image in 16 or 32 colour resolution, Extra Half Bright Mode or H.A.M. (4096 colour) mode.

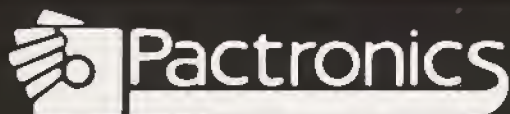
VIDI Framegrabber



Now you can make your own Clip-Art, Video Effects and digitised images (even animations in black and white). Quickly and inexpensively.

Only \$399 with Vidi Chrome colour software and filters.

* RGB splitter also available.



For your nearest retailer contact:

N.S.W.: Pactronics Pty Ltd, 98 Carnarvon St, Silverwater. (02) 748 4700

Victoria: Pactronics Pty Ltd, 55-55 Johnston Street, Fitzroy. (03) 419 4644

Queensland: Pactronics Pty Ltd, 12 Stratton St, Newstead, 4006. (07) 854 1982

South Australia: Refer Head Office or Victoria.

Western Australia: Pactronics, unit 13, 133 High Rd Willetton 6155. (09) 354 1122

C64 Sound & Graphics

by Greg Perry

Now we have our sprites set up, let's look at how we can use them in our own programs.

We will look at a number of simple but interesting techniques which you should be able to adapt to your own programs.

Example: sprites as string data. The following program displays three sprites using the same sprite data for each. The sprite pattern of the number 64 sitting under a palm tree, is set up in the data statements as string data. This pattern can be readily changed by editing the program in the normal manner.

Calculation of the correct 63 numbers for the sprite pattern is done by dissecting the strings (check out the method used and work out how it does it, Lines 320-350) and the numbers are shown on the screen as they are calculated. An "A" in the data string is taken as a screen dot with bit value of 1 and a space is taken as bit value of 0. The sprites used are sprite numbers 0-2.

Points to note:

- All three sprites use the same data block
- Remember that sprite 0 has priority over 1 and 2 and so will appear over the top of the images of the other two.
- The sprite-background priority has been altered for sprite 1 so that it will pass underneath the screen image.
- All the sprites are programmed to randomly expand in either direction when they cross at the centre of their travels.
- For simplicity, sprite X position is never greater than 255.

Program: SPRITE GENERATOR

```

10 REM (C) GREG PERRY, BRISBANE 1984
100 REM SIMPLE THREE SPRITE GENERATOR
110 REM SN=SPRITE NUMBER
120 REM V=START OF VIC CHIP
130 V=53248
140 REM SET EXPANDED SPRITES
150 POKE V+23,7: POKE V+29,7
160 REM CLEAR SPRITE RAM AREAS
170 FOR I=832 TO 1023: POKE I,0: NEXT I
180 REM SET SPRITE POINTERS TO DATA BLOCK
190 POKE 2040,13: POKE 2041,13: POKE 2042,13
200 REM POSITION SPRITE X AND Y ON SCREEN
210 FOR SN=0 TO 2
220 POKE V+SN*2,100+SN*10: REM X POS
230 POKE V+1+SN*2,100+SN*20: REM Y POS
240 REM ENABLE SPRITE SN
250 POKE V+21, PEEK (V+21) OR (2^SN)
260 REM SET Colour OF SPRITE SN
270 POKE V+39+SN,2+SN: NEXT SN
280 REM READ DATA AND CALCULATE BYTE NUMBERS
290 FOR ROW=0 TO 20
300 READ S$: PRINT S$;
310 FOR NO=0 TO 2:N=0
320 FOR BIT=7 TO 0 STEP -1
330 REM CALCULATE NUMBER
340 IF MID$(S$,1+NO*8+7-BIT,1)="A" THEN N=N+2^BIT
350 NEXT BIT
360 REM PUT NUMBER INTO IMAGE MAP

```

```

370 POKE 832+ROW*3+NO,N: PRINT N;
380 NEXT NO: PRINT
390 NEXT ROW
400 REM DISPLAY BACKGROUND AND MOVE SPRITES
410 PRINT "[CLR,DOWN4,RVS]"; FOR I=1 TO 40*6:
PRINT "[<Q>]"; NEXT I
420 REM SET SPRITE 1 TO UNDER SCREEN
430 POKE V+27,2
440 REM NOT EXPAND X AND Y
450 POKE V+23,0: POKE V+29,0
460 REM MOVE SPRITES
470 S=255: FOR I=1 TO 255
480 POKE V,I: POKE V+1,I
490 POKE V+2,S-I: POKE V+3,S-I
500 POKE V+4,I: POKE V+5,S-I
510 IF I<>128 THEN 570
520 REM RANDOMLY EXPAND SPRITES IN X &/OR Y
530 IF RND (0)>.2 THEN POKE V+23, RND (0)*7+.5
540 IF RND (0)>.2 THEN POKE V+29, RND (0)*7+.5
570 NEXT I: GOTO 450
600 REM SPRITE DATA
700 REM "765432107654321076543210"
710 DATA " AAA A AAA "
720 DATA " AAAAA A AAAAA "
730 DATA " AA AAAAA AA "
740 DATA " AA A A A AA "
750 DATA " AA A AA "
760 DATA " AA A AA "
770 DATA " A A A "
780 DATA " A "
790 DATA " AAAAAA A AA "
800 DATA " AAAAAA A AA "
810 DATA " AA AA A AA "
820 DATA " AA A AA "
830 DATA " AA A AA "
840 DATA " AAAAAA A AA AA "
850 DATA " AAAAAA A AA AA "
860 DATA " AA AA A AA AA "
870 DATA " AA AA A AAAAAA "
880 DATA " AAAAAA A AAAAAA "
890 DATA " A AAAAAA AAA AA A "
900 DATA " A AAAAA AA A "
910 DATA "AAAAAAAAAAAAAAAAAAAAA "

```

Exercises

1. Design your own sprite in data statements.
2. Change sprite colours.
3. Change sprite movement routine.
4. Change movement to include full range of X 0-344.
5. Change expansion to X or Y expand only.

Example: Bouncing and full range of X. To program a sprite to "bounce" around the visible screen area, like a ball on a billiard table, involves increasing or decreasing the X and Y coordinates and ensuring that, when the boundary (as defined above) is reached, the corresponding X or Y movement is reversed in direction. This is shown by the following subroutine.

Add these Lines to the program above.

```

550 REM RANDOMLY BOUNCE SPRITE
560 IF RND(0)>.2 THEN GOSUB 590
580 REM BOUNCE SPRITE AROUND SCREEN

```


WE CAN BEAT ANY ADVERTISED PRICE! BUT WE SELDOM HAVE TO - OUR PRICES ARE THE LOWEST! (IF YOU SEE A LOWER PRICED ITEM, TELL US, IF YOU DON'T, TELL YOUR FRIENDS.)



AMIGA

PHONE: (02) 519 5323

C64/128

ARCADE

Apprentice	57
Arachnophobia	57
Atomic Robokid	57
Awesome (w/T ehin)	77
Back to the Future III	67
Backlands	67
Bar Games	57
Battlestorm	77
Chase HQ II	67
Colony	64
Crime Wave	67
Cyberball	67
Death Trap	57
Dick Tracy	57
Dragon Breed	67
Dragon Flight	77
Double Dragon II	48
Dragon's Lair II	87
Dyer 07	77
E-Motion	57
E-Swat	57
Fire and Forget II	57
Fimbo's Quest	57
Flip II and Magnose	57
Flood	47
Ghostbusters II	47
Ghost'n Goblins	57
Gold of the Aztecs	57
Gremlin 2	57
Hammerfist	57
Hardball II	57
Hard Driv' II	57
Ishido	67
It Came from Desert	57
James Pond	57
Kid Gloves	57
Killing Game Show	57
Lemmings	67

ADVENTURE

Bandit Kings of A.C. ..	87
Bat	57
Buck Rogers	57
Cadaver	57
Captive	57
Castle Master	57
Champlone Kyrnn	52
Champlone of Raj	62
Chase Strikes Back	67
Chrono Quest II	67
Codenamed Iceman	67
Codenamed Bequest	67
Corporation	57
Conquest of Camelot ..	57
Dragon Strike	57
Dragon's Breath	77
Drakkhen	57
Dungeon Master	57
Elvira	77
Hero's Quest	67
Hound Shadow	57
Hunt for Red October ..	48
Indiana Jones Adv	57
Khalael	57
King's Quest IV	67
Knight of Crystallion ..	57
Legend of Faerghall ..	57
Leisure Suit Larry III ..	57
Leisure Suit Larry III ..	85
Loom	57
Manhunter II	67
Might & Magic II	57
Mortville Manor	38
Operation Stealth	57
Pirates	57
Police Quest I/II	57
Pools of Radiance	48
Shogun	67

SPORTS

4D Boxing	67
Colica GT	57
Days Of Thunder	67
Greg Norman Golf	57
Hard Ball 2	57
Harley Davidson	57
Honda RVF	47
Indianapolis 500	47
Jack Nicklaus Golf	57
Kick Off II	57
Omni Play Basketball ..	57
Pro Tennis 2	67
Street Rod	47
Tennis Cup	47
TV Sport Basketball	67
TV Sport Football	47
World Cup Soccer	67

SPREADSHEETS

Advantage	257
DG Calc	85
Halcalc	77
Superplan	110

GRAPHICS

Comic Setter	92
Credit Text Scrol	57
Deluxe Paint III	97
Deluxe Photo Lab	97
Deluxe Print II	97
Deluxe Video III	97
Design 3-D	129
Digi-Mate 3	57
Digi-Paint 3	109
Digi-View Gold 4	249
Digi-Works 3D	175

ENTERTAINMENT

American Civil War	52
Back to the Future	38
Barbarian II	38
Bard's Tale Trilogy	48
Battle Chess	38
Batman the Movie	38
Cabal	34
Castle Master	38
Chessmaster 2100	47
Champs of Kyrnn	47
Chase HQ	34
Circus Attract	38
Curse Azure Bonds	33
Deliverance	38
Double Dragon II	38
Dragon Ninja	38
Enlira	38
Eye Of Horus	38
F14 Tomcat	42
F15 Strike Eagle	38
F16 Combat Pilot	38
Fimbo's Quest	34
Ghouls and Ghosts	38
Greg Norman Golf	47
Hammer Fist	38
Hard Drivin'	38
Heroes	38
Hillfist	34
Hot Rod	38
Hunt for Red October ..	38
Iron Lord	47
Italy 1990	38
Kick Off II	38
Klex	38
Last Ninja II	34
Leonardo	38
Mean Street	38
Might & Magic	38
Might & Magic II	38
Monopoly	38

Ninja Spirit	38
New Zealand Story	34
Pools of Radiance	44
Project Stealth Flight'r ..	47
Rainbow Island	38
Reash for the Stars	47
Red Storm Rising	47
Russia	38
Secret of Silver Blade ..	33
SKL or Die	29
Starlord	38
Street Rod	38
Test Drive II	38
Turrican	34
TV Sports Football	47
Ultima 4	75
Wall Street	38
Winners Italy 1990	38
Wizardry V	57
X Out	34

Geos Int'l Font Pack	37
Home Video Prod.	62
Mini Office II	42
Neweroom	37
Music Const. Set	29
News Maker 128	57
Paperclip III	95
Paperclip Publisher	52
Pocket Series ea.	67
Power Cartridge	57
Printmaster Plus	57
Print Power	29
Print Shop	77
Superbase 64	57
Superscript 64	57
Swiftcalc	35
The Print Shop	72
Top 20 Tools	38
Video Basic 64	57
Word Writer 5	67

***NOTE - WHEN COMPARING PRICES WE OFFER FREE!!! POSTAGE & HANDLING IN AUSTRALIA**

SIMULATORS

A10 Tank Killer	67
Bomber Mission	38
F18 Combat Pilot	47
F18 Stealth Fighter	67
F20 Retaliator	57
Falcon	52
Falcon Mission	47
Falcon Mission 2	47
Flight of the Intruder ..	77
Mig 29	67
Their Finest Hour	67
Wings	67

Director II	179
Director Tool Kit	55
Ham It Up	59
Introcad Plus	189
Lights, Cameras, Act. ..	85
Modeller 3D	109
Moviecreator	90
Page Flipper Plus I/x ..	175
Page Flipper 3D	175
Photopaint II	119
Pix Mate	75
Printmaster Plus	57
Sculpt 3DXL	249
Sculpt 4D Jnr	219
TV Text Professional ..	179
Ultra Design	435
Videoscape 3D V2	219
X-Cad Designer	219

BUSINESS

Day By Day	57
Desktop Budget	95
Easy Ledgers	375
Gold Disk Office	359
Home Accounts	85
System 3	119
The Accountant	399
Works Platinum	185

MUSIC

Audio Master III	119
Bare & Pipes	239
Dr T's Copyist Appr.	139
Dr T's Copyist DTP	399
Dr T's Tiger Cub	110
Master Tracks Pro	499
Perfect Sound	169

DATA BASE

Data Retrieve	89
Data Retrieve Pro	180
DBman V	385
Superbase	77
Superbase 2	120
Superbase Pro	275

LANGUAGES

AC/Basic	269
Amiga Vision	175

PageStream 2.1
this month \$345

- Only PageStream DTP allows you to edit and colour ProDraw clips!
- Just one more reason why PageStream is #1.

DESKTOP PUB.

Outline Fonts	259
Pagesetter II	165
Pagestream V2	359
Pagestream fonts ea.	52
Pro Page 1.3	279
Professional Draw 2	249
Publishers Choice	185

Amos	115
Axxxx	69
Assempro	140
Aztec C Pro	385
Benchmark Mod-2	269
Can Do	179
Dawpack 2.0	145
J Forth Pro 2.0	339

WORD PROCESS'S

Becker Text	125
Cygnus Pro	125
Excellence 2	269
Gold Disk Type	75
Kind Words II	92
Kind Words II	175
Protext	179
Prowrite V3.0	169
Prowrite Fonts ea.	57
Word Perfect V4.1	469

UTILITIES

Cl-Mate	65
Grease Dos V4.0	57
Digal	99
Disk Mechanic	109
Diskmaster	69
Doctor Amr	57
Mac 2 Dos	179
Pixel Script	159
Superback	105
Syncrexpress	129

AMIGA 500

512K RAM

ONLY \$89

Inc. on/off switch and clock

Line of Fire	57
Lorde Rising Sun	57
Lotus Esprit Turbo	57
Midnight Resistance	57
Mighty Bombjack	67
N.A.R.C	67
Night Hunter	57
Nightbreed	52
Ninja Warriors	57
Nitro	67
Pang	57
Powerdrift	57
Precious Metal	57
Puzznic	57
Resolution 101	57
Rick Dangerous II	57
Robocop II	67
Rock & Roll	47
Shadow Beast II	77
Simulora	47
Skweek	47
Sly Spy Secret Agent	57
Space Ace	87
Space Rogue	65
Strider II	57
Super Monaco GP	57
Super Off Road	57
Teenage Ninja Turtles ..	57
Test Drive II	38
Test Drive II Disks	38
The spy who loved me ..	57
Torvak The Warrior	57
Turn It	57
Turrican I & II (each) ..	57
Unreal	57
Wings Of Fury	67
Wrath of the Demon	57
Xenon II	57
Xiphos	57
Space Quest I/II	47
Space Quest III	57
Theme Park Mystery	48
Thrill Winning	57
Untouchables	57
Xenomorph	57
Auterlitz	57
Bal. of Power 1990	57
Betrayal	67
Borodino	47
Carrier Command	57
Conflict Europe	57
Courtroom	67
Debut	57
Fire Brigade	57
Full Metal Planet	57
Genghis Khan	77
Harpoon	67
Imperium	47
Khalael	57
M1 Tank Platoon	57
Midwinter	77
North & South	57
Oil Imperium	57
Over Run	47
Powermonger	57
Prince of Persia	57
Rork's Drill	52
Second Front	57
Sherman M4	57
Sim City	62
Sim City Terzeln	38
Supremacy	67
Team Yankee	67
Uma II	67
Warhead	57
Waterloo	57

PRODUCTIVITY

Action Replay VI	129
Blitz 64	38
Cobol 64	57
Expert Cartridge	139
Fast Load Cartridge ..	47
Fast Cartridge III	119
Font Master II 64	77

FREEZE MACHINE ONLY \$55

EDUCATIONAL

Algo Blaster	67
Allen Addition	39
Animal Kingdom	39
Carmen Sandiego ea.	62
Decimal Dungeon	39
Demolition Division ..	39
Family Fued	29
Fraction Action	39
Math Blaster	57
Mavis Beacon Typing	47
Minute Mission	39
Number Farm	39
Sim City	57
Speed Reader II	47
Spell It	67
Spelling Wiz	39
Wheel of Fortune	29

WE ALSO CARRY TITLES FOR: C64 CASSETTE 128 M, ATARI ST AND AMSTRAD.

MAIL ORDER FORM

HOW TO ORDER USING THIS FORM:

- Select your products from the ad.
- Fill out this form.
- Mail this order form to: **LOGICO**
Marrickville Metro Shopping Centre
Shop 3A/36 Victoria Road
Marrickville NSW 2204

NAME: _____

ADDRESS: _____

POST CODE: _____

PHONE: () _____ DATE SENT: _____

QTY	PRODUCT/PROGRAM NAME	COMPUTER	DISK TYPE	PRICE

METHOD OF PAYMENT: Please tick
☐ BANKCARD ☐ MASTERCARD
☐ VISA ☐ AMERICAN EXPRESS
☐ CHEQUE ☐ MONEY ORDER

POSTAL CHARGE **FREE**

TOTAL \$ _____

CREDIT CARD USERS ONLY:

Credit Card No: _____ Exp. Date ____/____/____

Signature: _____

JUST BECAUSE YOU DON'T SEE IT - DOESN'T MEAN WE DON'T HAVE IT !!



Phone:
(02) 979 5833
Fax:
(02) 979 6629

WE HAVE

GAMES

A.P.B.	\$49.95
ACTION FIGHTER	\$69.95
ACTION STATIONS STRATEGY	\$69.95
ADVANCED TACTICAL FIGHTER II	\$69.95
ALL DOGS GO TO HEAVEN	\$69.95
AMOS GAME CREATOR	\$125.00
ANARCHY	\$59.95
APPRENTICE	\$59.95
ASTATE	\$49.95
ASTRO MARINE CORPS	\$69.95
ATOMIX	\$49.95
AWESOME + T-SHIRT	\$79.95
BADLANDS	\$69.95
BAT	\$89.95
BATMAN - CAPED CRUSADER	\$45.00
BATTLE SQUADRON	\$59.95
BATTLE VALLEY	\$49.95

MAL'S THUMBS UP

☆☆ SWIV ☆☆
TURRICAN II DAS BOOT
PRINCE OF PERSIA

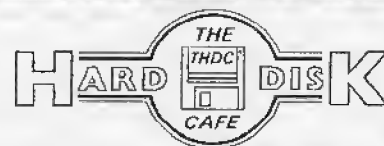
BATTLESHIPS	\$19.95
BERLIN - EAST V WEST	\$69.95
BATTLE STORM	\$79.95
BIO CHALLENGE	\$49.95
BLITZKRIEG STRATEGY	\$79.95
BLOCKBUSTER PAK - SSI	\$59.95
BLOODWYCH	\$69.95
BLUE ANGEL 69	\$49.95
BLUE MAX	\$69.95
BORODINO	\$49.95
BOULDERDASH CONSTRUCTION SET	\$16.95
BRAIN SCRAMBLER - JIGSAW	\$29.95
BREACH 2	\$59.95
B.S.S. JANE SEYMOUR	\$69.95
BUBBLE BOBBLE - 2 CAN PLAY	\$59.95
BUCK ROGERS-C/DOWN DOOMSDAY	\$49.95
BUFFALO BILLS RODEO	\$59.95
CAPTIVE	\$69.95
CONQUESTS OF CAMELOT (SIERRA)	\$59.95
CARRIER COMMAND	\$49.00
CARTHAGE	\$69.95
CARVE UP	\$69.95
CASTLE WARRIOR	\$69.95
CHAMPIONS OF KRYNN	\$54.95
CHARIOTS OF WRATH - SPECIAL	\$49.95
CHESS CHAMPION 2175	\$79.95
CHESS PLAYER 2150	\$69.95
CHRONO QUEST II	\$79.95
CINEMAWARE COMP - 3 FABULOUS WORLDS	\$59.95
(ROCKET RANGER+THREE STOOGES+SIENBAD)	
CINEMAWARE COMP - 3 MORE WORLDS	\$59.95
(SDI+DEFENDER OF CROWN+KING OF CHICAGO)	
CODENAME ICE MAN (SIERRA)	\$59.95
COLONEL'S BEQUEST	\$59.95
COLORADO	\$69.95
COMMANDOS PACK	\$59.95
CONTACT	\$59.95
CRAZY SHOT - USES GUN/MOUSE	\$49.95
CRIBBAGE & GIN KING	\$59.95
CYBERBALL	\$49.95
CYBERWORLD	\$59.95
DAMOCLES	\$49.95
DANGER FREAK	\$59.95
DARIUS +	\$49.95
DARK CENTURY	\$59.95
DARK SIDE	\$49.95
DAS BOOT - U-BOAT SIM - GREAT!	\$69.95
DAY OF THE PHAROH	\$54.95
DAY OF THE VIPER	\$59.95
DAYS OF THUNDER	\$69.95
DEATH TRAP	\$59.95
DEBUT	\$69.95

DEMONS TOMB	\$54.95
DEMONS WINTER	\$45.95
DR. PLUMMET'S HOUSE OF FLUX	\$49.95
DR. DOOMS REVENGE - SPECIAL	\$49.95
DRAGON FLIGHT	\$79.95
DRAGON'S LAIR II	\$59.95
DRAGON SPIRIT - SPECIAL	\$39.00
DRAGONSTRIKE	\$59.95
DREAM ZONE	\$39.95
DUCK TALES - QUEST FOR GOLD	\$59.95
DUNGEON MASTER 1 MEG ONLY	\$59.95
DYNASTY WARS	\$59.95
ELITE GAMES PACK VOL 1	\$49.95
EMPEROR OF THE MINES	\$49.95
ESCAPE - From planet robot monsters	\$49.95
ESKIMO GAMES	\$49.95
EUROPEAN DREAMS - COMPILATION	\$59.95
EXTRA TIME - FOR KICKOFF	\$59.95
F-16 FALCON	\$59.95
F-19 STEALTH FIGHTER	\$89.95
F-18 INTERCEPTOR	\$45.95
FALCON MISSION DISK 2	\$49.95
FACES TRIS III	\$59.95
FIENDISH FREDDY - SPECIAL	\$49.00
FIGHTER BOMBER MISSION DISK	\$59.95
FIRE & FORGET II	\$59.95
FIST OF FURY COMP - SHINOBI-DYNAMITE	
DUX-NINJA WARRIORS-DOUBLE DRAGON	\$59.95
FLIPPIT + MAGNOSE	\$59.95
FLOOD	\$49.95
FORGOTTEN WORLDS - SPECIAL	\$49.95
FUSION	\$45.00
FUTURE BASKETBALL	\$59.95
FUTURE BIKE (SIM)	\$39.95
FUTURE CLASSICS - COMP	\$59.95
FUTURE DREAMS - COMP	\$59.95
GHOSTS & GOBLINS	\$49.95
GLOBULOUS	\$59.95
GOLD FEVER PACK	\$49.95
GOLD OF THE AZTECS	\$59.95
GOLDRUSH - SIERRA	\$61.95
GRAND NATIONAL (Horses)	\$49.95
GRAND SLAM TENNIS	\$16.95
GREMLINS 2	\$59.95
HARD DRIVIN' 2	\$69.95
HARLEY DAVIDSON BIKES	\$59.95
HARPOON	\$69.95
HEATWAVE (Boat racing)	\$59.95
HEWSONS PREMIER COLLECTION	\$49.95
HILLSFAR - DUNGEONS & DRAGONS	\$45.95
HOLE IN ONE GOLF - MINI-144 HOLE	\$44.95
HONDA RVF - PLAYS WELL	\$49.95
HONG KONG PHOOEY	\$39.95
HOYLES SOLITAIRE VOL 2	\$89.95
HOYLES SOLITAIRE VOL 1	\$59.95
HUNT FOR RED OCTOBER	\$44.95
INDIANA JONES LAST CRUSADE	\$69.95
INDY 500	\$49.95
INFESTATION	\$59.95
INTERPHASE	\$59.95
ISHIDO	\$69.95
JOKER X-WORD	\$19.00
JUDGE DREDD	\$59.95
JUMPING JACKSON	\$49.95
KEEF THE THIEF - ADVENTURE	\$49.95
KELLY X	\$19.95
KENNY DALGLISH SOCCER	\$49.95
KHALAAN	\$59.95
KICK OFF	\$49.95
KICK OFF - EXTRA TIME	\$59.95
KID GLOVES	\$69.95
KILLING GAME SHOW	\$69.95
KINGS QUEST I	\$49.95
KINGS QUEST II	\$69.95
KINGS QUEST III	\$69.95
KONIX SPEEDKING JOYSTICK - GREAT	\$39.95
LEGEND DJEL	\$49.95
LEGEND OF FAERGAIL - MAL LIKES IT	\$69.95
LEISURE SUIT LARRY	\$49.95

LEISURE SUIT LARRY II	\$49.95
LEISURE SUIT LARRY III	\$59.95
LEMMINGS - DARE YOU TO PUT IT DOWN	\$69.95
LICENSE TO KILL	\$49.95
LOST DUTCHMAN'S MINE	\$69.95
LOST PATROL	\$59.95
LOTUS ESPRIT TURBO CHALLENGE	\$69.95
M1 TANK PLATOON	\$89.95
MANHUNTER - NEW YORK (Sierra)	\$49.95
MANHUNTER 2 (San Francisco)	\$59.95
MANNIX	\$59.95
MATRIX MARAUDERS	\$59.95
MAYDAY SQUAD	\$49.95
MICROPROSE SOCCER	\$59.95
MIDNIGHT RESISTANCE	\$59.95
MIDWINTER	\$79.95
MIGHT & MAGIC II	\$59.95
MIND GAMES	\$69.95
MR. HELI - SPECIAL	\$49.95
MURDER	\$59.95
MYSTICAL	\$69.95
NARCO POLICE	\$59.95
NEUROMANCER	\$59.95
NIGHT BREED ACTION	\$59.95
NIGHT HUNTER	\$59.95
NITRO	\$59.95
NUCLEAR WAR	\$49.95
OCEAN ACTION PACK	\$59.95
OIL EMPORIUM	\$54.95
ONSLAUGHT	\$49.95
OPERATION COMBAT	\$79.95
OPERATION HARRIER	\$59.95
OPERATION STEALTH	\$59.95
ORIENTAL GAMES	\$69.95
OVERRUN	\$49.95
PANG	\$59.95
PARADROID	\$59.95
PERSIAN GULF INFERNO	\$69.95
PHANTASM	\$29.95
PHASER GUN - SPECIAL	\$39.95
PICTIONARY	\$45.95
PIPE MANIA	\$59.95
PLANET PROBE	\$49.95
PLOTTING	\$59.95
POLICE QUEST	\$61.95
POLICE QUEST 2	\$61.95
POOL OF RADIANCE (D&D)	\$64.95
POPULOUS	\$45.95
POWERDROME	\$45.95
POWERDRIFT	\$59.95
POWERMONGER	\$49.95
PRINCE OF PERSIA	\$64.95
PRO TENNIS TOUR 2	\$69.95
PROJECT YLE	\$45.95
PUFFY'S SAGA	\$59.95
PURPLE SATIN DAY	\$49.95
PUZZNIC - ADDICTIVE	\$59.95
PYSCHO	\$49.95
QUADRALIEN	\$69.95
QUARTZ	\$49.95
RAINBOW WARRIOR	\$59.95
RALLY CROSS	\$49.95
RED LIGHTNING	\$54.95
RED STORM RISING	\$69.95
REALM OF THE TROLLS	\$61.95
RICK DANGEROUS 2	\$59.95
RISK	\$29.95
ROADWARS	\$19.95
ROBOCOP 2	\$59.95
ROGUE TROOPER	\$64.95
RUFF AND REDDY	\$39.95
RVF HONDA	\$49.95
SAFARI GUNS	\$49.95
SCRAMBLE SPIRITS	\$49.95
SHADOW OF THE BEAST II	\$79.95
SIM CITY	\$84.95
SIM CITY TERRAIN EDITOR	\$34.95
SIM CITY GRAPHICS 1 - ANCIENT CITIES	\$59.95
SIM CITY GRAPHICS 2 - FUTURE CITIES	\$59.95

AMIGA 3000's

Phone:
(02) 979 5833
Fax:
(02) 979 6629



SIMILCRA	\$49.95
SKIDOO	\$39.95
SKYCHASE	\$52.95
SLEEPING GODS LIE	\$69.95
SOLITAIRE - VOL 1 SEA HAVEN	\$39.95
SOLITAIRE - VOL 2 CALCULATION	\$39.95
SOLITAIRE - VOL 3 ACCORDION	\$39.95
SPACE RACER	\$49.95
SPACE SCHOOL	\$39.95
SPACE QUEST	\$44.95
SPACE QUEST II	\$59.95
SPACE QUEST III	\$59.95
SPEEDBALL 2	\$39.95
SPY V SPY	\$16.95
SPY V SPY - ARCTIC ANTICS	\$16.95
SPY V SPY - ISLAND CAPER	\$16.95
STAR BREAKER	\$49.95
STAR CURSOR J/S - 3 YR GUARANTEE	\$54.95
STEEL	\$49.95
SUMMER OLYMPIAD	\$29.95
SUPERMAN - MAN OF STEEL	\$49.95
STORM ACROSS EUROPE	\$49.95
STRIDER II	\$59.95
STUN RUNNER	\$69.95
SUPER SQUAD	\$59.95
* SUPREMACY - NEIL LOVES IT	\$69.95
SWIV - SILKWORM SEQUEL	\$69.95
T.M.N. TURTLES	\$69.95
TEAM SUZUKI	\$69.95
TEAM YANKEE	\$89.95
THE BIG ONE - LOTTO SYSTEMS	\$19.95
THE POWER PACK	\$79.95
THE COLONELS BEQUEST	\$59.95
THE HOUND OF SHADOW	\$49.95
THE MUNSTERS	\$49.95
THEIR FINEST HOUR - Battle of Britain	\$59.95
THEME PARK MYSTERY	\$59.95
THRILL OF WINNING VOL II	\$59.95

☆ SPECIALS BOX ☆
AMIGA VIDEO ADD ON PACKS
9 INCLUDES GENLOCK, S/WARE, VIDEO)

THUNDERSTRIKES	\$59.95
TIE BREAK	\$59.95
TIME	\$69.95
TIME MACHINE	\$59.95
TORVAK WARRIOR	\$69.95
TOTAL ECLIPSE	\$49.95
TRACKSUIT MANAGER - SOCCER	\$39.95
TURBO OUTFIT	\$49.95
TV SPORTS FOOTBALL	\$69.95
TOM AND THE GHOST	\$69.95
TOURNAMENT GOLF	\$59.95
TWILYTE	\$16.95
TURRICAN II	\$69.95
ULTIMA V	\$79.95
U.M.S VIETNAM	\$29.95
ULTIMA IV	\$79.95
UNREAL - GREAT GRAPHICS	\$59.95
VAXINE	\$59.95
VENUS FLYTRAP	\$59.95
VOYAGER	\$59.95
WAR GAME CONSTRUCTION SET	\$49.95
WARLOCK - THE AVENGER	\$59.95
WHITE DEATH STRATEGY	\$79.95
WICKED	\$59.95
WINGS OF DEATH	\$49.95
WINNERS ITALY 1990 SOCCER	\$49.95
* WINGS CINEMAWARE	\$89.95
WINGS OF FURY	\$69.95
* WOLF PACK - WAITING TREV'S VERDICT	\$79.95
WORLD CHAMP SOCCER	\$69.95
WORLD CUP COMP	\$69.95
WORLD TOUR GOLF	\$45.95
WRATH OF THE DEMON	\$89.95
XENOMORPH	\$59.95
XYBOTS	\$45.95
YOGI'S GREAT ESCAPE	\$39.95

ZAK MC KRACKEN	\$52.95
ZANY GOLF - NEAT GAME	\$49.95
ZOMBIES	\$59.95

PRODUCTIVITY

3-D PROFESSIONAL (WITH VIDEO)	\$350.00
A TALK 3 - SPECIAL	\$69.95
ALL IN ONE - BY GOLD DISK - NEW	\$99.95
A-MAX - SPECIAL III	\$149.95
AMIGA POST CODE	\$49.95
AMIGA VISION - SPECIAL	\$150.00
AMOS	\$125.00
ART DEPT PROFESSIONAL	\$349.00
ART PARTS - FOR DPAINT 3	\$49.95
ASSEMBRO	\$149.00
AUDIO ENGINEER S/WARE/H/WARE	\$CALL
BROADCAST TITLER V2 PAL - the best!	\$450.00
CROSS DOS - V4.0	\$64.95
DELUXE MUSIC CONSTRUCTION SET	\$99.00
DELUXE PAINT III	\$99.00
DELUXE PHOTO LAB (POSTERS TOO)	\$99.00
DELUXE PRINT II	\$99.95
DELUXE VIDEO III	\$99.95
DESKTOP BUDGET - SPECIAL	\$49.95
DIGIPAIN 3 *	\$135.00
DIGIVIEW GOLD 4	\$269.00
DIRECTOR V.2	\$189.00
DISTANT SUNS	\$99.95
DIRECTORY OPUS VER 2 - HOT	\$49.95
DRAW 2000 - SPECIAL	\$69.95
DYNACADD	\$CALL
EASY LEDGERS (WITH JOB COSTING)	\$499.00
EASY LEDGERS ACCOUNTING	\$375.00
ECLIPS - PRO DRAW/PAGE CLIP ART	\$139.00
ELECTRIC THESAURUS	\$69.95
ELECTRONICS DEBTORS SYSTEM	\$299.00
FLASHBACK - HD BACKUP - NEW	\$79.95
GOLDSPELL 2	\$44.95
G.P. TERM - TERMINAL PROGRAM	\$99.00
HAM IT UP - WORKS WITH DPAINT	\$69.95
HEADLINE FONTS 1	\$99.00
HEADLINE FONTS 2	\$99.00
HEADLINE FONTS SUB	\$99.00
HOME BUILDERS CAD	\$299.00
IMAGINE - HOT - NEW - RAYTRACING	\$399.00
INTROCAD	\$99.00
KARA ANIM FONTS	\$79.95
KINDWORDS	\$69.00
LATTICE C V5	\$399.00
MAC TO DOS	\$189.00
MODELLER 3D - SPECIAL	\$69.95
OUTLINE FONTS FOR PRO PAGE	\$269.00
PAGESTREAM FONTS VOL 1.1	\$59.95
PAGESTREAM V2.0	\$299.00
PHOTON PAINT V2 - HAM PAINT	\$199.00
PRINTMASTER ART GALLERY 1	\$49.95
PRO VIDEO FONTS (SET 2)	\$149.00
PROFESSIONAL DRAW V2.0*	\$275.00
PROFESSIONAL PAGE - SPECIAL	\$295.00
PROF PAGE - STRUCTURED CLIPART	\$79.95
PROFESSIONAL PAGE V2 + VIDEO	\$450.00
PROWRITE V3.0	\$199.00
PROWRITE - GERMAN DICTIONARY	\$49.95
PROWRITE - PROFONTS 1 (extra fonts)	\$49.95
PROWRITE - PROFONTS 2 (extra fonts)	\$49.95
QUARTERBACK (HD BACKUP)	\$99.00
QUARTERBACK TOOLS	\$99.00
QUICKWRITE - WORD PRO - good one	\$99.95
SCENE GENERATOR	\$74.95
SEASONS & HOLIDAYS CLIP ART	\$49.95
SPRITZ PAINT PROG	\$99.95
SUPERBACK	\$99.95
SYSTEM 3 (ACCOUNTS)	\$129.00

THE ART DEPARTMENT	\$129.00
THE DIRECTOR	\$99.00
THE OFFICE - GOLD DISK	\$399.00
TV TEXT PROFESSIONAL	\$259.00
ULTRA CARD PLUS	\$145.00
VIDEO TOOLS	\$299.00
VIDI AMIGA F/GRABBER B/W LO-RES	\$399.00
WALT DISNEY ANIMAT'N STUDIO - Hol	\$249.00

MUSIC

BARS AND PIPES	\$199.00
BARS AND PIPES EXTRA MODULES	\$CALL
DELUXE MUSIC CONSTRUCTION SET	\$99.95
DR T'S COPYIST APPRENTICE	\$149.00
DR T'S COPYIST DTP	\$449.00
DR T'S PHANTOM (SYMPTY SYNCH)	\$CALL
DR T'S TIGER CUB	\$119.00
FUTURE SOUND - (STEREO DIGITISR)	\$299.00
HARMONI	\$149.95
KAWAI FUN LAB KEYBOARD - \$100 off	\$895.00
KEYBOARD EDITORS	\$CALL
MASTER SOUND (MONO DIGITIZER)	\$89.95
MIDI MAGIC	\$299.00
MIDI INTERFACE	\$89.95
MUSIC X - STILL THE BEST	\$299.00
MUSIC X JUNIOR	\$CALL
PERFECT SOUND 3.0	\$199.00
SONIX 2.0 - MUSIC	\$99.00
SOUND EXPRESS - (STEREO DIGIT'R)	\$129.00

BOOKS

AMIGA 3D GRAPHICS PROGRAMMING	\$49.95
AMIGA BASIC INSIDE & OUT	\$49.95
AMIGA C FOR BEGINNERS	\$49.95
AMIGA C FOR Advanced Programmers	\$69.95
AMIGA DESKTOP VIDEO GUIDE	\$49.95
AMIGA DISK DRIVES INSIDE & OUT	\$49.95
AMIGADOS INSIDE & OUT	\$49.95
AMIGADOS QUICK REF GUIDE	\$29.95
AMIGA FOR BEGINNERS	\$39.95
AMIGA GRAPHICS INSIDE & OUT	\$49.95
AMIGA HARDWARE MANUAL	\$49.95
AMIGA MACHINE LANGUAGE	\$49.95
AMIGA MORE TRICKS & TIPS	\$49.95
AMIGA PROGRAMMERS HANDBOOK	\$54.95
AMIGA ROM KERNEL LIBS & DEVICES	\$59.95
AMIGA ROM KERNEL REF MANUAL	\$59.95
AMIGA SYSTEM Programmers Guide	\$69.95
AMIGA TRICKS & TIPS	\$39.95
AMIGA BASIC ADVANCED	\$34.95
AMIGA BASIC MANUAL	\$29.95
SIERRA & OTHER HINT BOOKS	

G'DAYS

G'DAY TO MIKE BENNET &
DAVID & ALL THE GUYS AT
CHANNEL 9

☆☆☆☆☆

HI TO BILL MINNETT AT
CHANNEL 2
ON ANDREW DENTON'S
"LIVE AND SWEATY"

ON DISPLAY, ALWAYS

SHOP 9 AKUNA LANE - P.O. BOX 879, MONA VALE 2103

HARDWARE & ACCESSORIES

Amiga 500 Video Packs	\$1599.00	Star LC24-200 Colour 24 Pin Printer *	\$750.00
Amiga 500 Video Add On Packs	\$699.00	Citizen CSX-140 Colour 24 Pin Printer *	\$799.00
Amiga 500 Music Packs	\$1299.00	Canon Bubble Jet Printer	\$799.00
Amiga 500 Music Add On Packs	\$399.00	* = All printers come with Free printer cable.	
Amiga 500 Starter Kit with Intro VideoTutorial with Extra 18 Programs	\$850.00	Amiga 3000's 100mb or 40mb	\$Call
Amiga A590 Hard Drive	599.00	Amiga Deluxe Kit	\$1099.00
Amiga A590 Hard Drive with 2MB Ram	\$799.00		
*** Call About Larger Hard Drives ***			
Amiga A501 Ram Expansion & Clock	\$145.00		
Amiga 1010 External 3.5" Drive	\$165.00		
Amiga 2000 - Special Price	\$1599.00		
Amiga 2000 Pro Pack (Heaps of S/Ware)	\$1699.00		
Amiga 2000HD Pro Pack (Heaps of S/Ware)	\$Call		
Amiga 2091 + 40Mb Hard Drive (Expandable)	\$1100.00		
1950 Hi-Res Monitor (For A3000 & Ver2.0)	\$Call		
Amiga 2000/22500/3090 Internal Genlock	\$399.00		
Nerki Desktop Genlock VHS/SVHS	\$1199.00		
Videtek Scanlock Genlock VHS/SVHS	\$1699.00		
Videtek VideoMaster Genlock VHS/SVHS & Splitter	\$2495.00		
A2000 AT Bridgeboard & 5 1/4" Drive	\$875.00		
A2000 XT Bridgeboard & 5 1/4" Drive	\$475.00		
A500 XT Card With 512k, Clock & Dcs 4.1	\$699.00		
Ver 1.3 Rom Chips	\$29.95		
Super Agnus Chip	\$59.95		
Super Denise Chip	\$59.95		
Rom Chips - 68010	\$39.95		
Keyboard Cover Skins for Amiga 2000	\$39.95		
Keyboard Cover Skins for Amiga 500	\$29.95		
Joystick Extension Cable	\$10.95		
DigiView/Printer Switch Box & Cable	\$69.95		
Stereo Monitor Switch Box	\$29.95		
Harris Hitek Filter Screen (Reduces Flicker)	\$39.95		
Prism Colour Splitter & Extra Cable	\$499.00		
Canon ION Still Video Camera Kit	\$1250.00		
Vidi Amiga Frame Grabber B/W	\$399.00		
B/W Video Camera (The Old Way!)	\$699.00		
Sharp JX-100 Colour Scanner	\$1495.00		
Colourburst 24Bit System	\$Call		
Kurta Graphics Tablet (S/Ware EXTRA)	\$999.00		
Kawai Funlab Keyboard & Midi I/F	\$895.00		
Commodore 1230 9 Pin Printer B/W *	\$325.00		
Star NX-1000 Colour 9 Pin Printer *	\$375.00		
Citizen 200GX Colour 9 Pin Printer 8	\$475.00		

NEWS 'N' STUFF

Bars and Pipes Professional (Hot Stuff)

Phoenix Audio Digitizer

(a no frills sound card for \$50)

**Australian Amiga User Group
Expo**
at Parramatta Town Hall on
Saturday 1st June

East Coast Amiga Open Day
Sunday 9th June at Erina

THE HARD DISK CAFE

POSTAL ADDRESS
P.O. BOX 879, MONA VALE 2103
PH: (02) 979 5833 FAX: (02) 979 6629
AUTHORISED EDUCATION
DEALER

**PHONE FOR THE LATEST
NEWS ON SPECIALS AND
NEWEST PRICES ON
HARDWARE.**

EDUCATION

READING & TYPING		AGE 3-6	\$39.95
ALPHABET		PRESCHOOL	\$49.95
ARITHMETIC		HIGH SCHOOL	\$69.95
ASSOCIATED - WORD ASSOCIATION		AGE 3-8	\$39.95
BAMBINOS JIGSAW PUZZLE		AGE 3-8	\$39.95
BASIC GRAMMER		AGE 7 & UP	\$49.95
BETTER SPELLING		8 TO ADULT	\$59.95
CROSS OUT THE INTRUDER		AGE 3-8	\$39.95
DECIMAL DUNGEON		AGE 5 & UP	\$69.95
DINOSAUR DISCOVERY KIT			\$54.95
DISCOVER ALPHABET		AGE 6 & UP	\$39.95
DISCOVER CHEMISTRY		AGE 12 & UP	\$39.95
DISCOVER MATHS		AGE 10 & UP	\$39.95
DISCOVER NUMBERS		AGE 6 & UP	\$39.95
DISCOVERY GEOGRAPHY	expansion disk	GRADE 9-12	\$29.95
DISCOVERY HISTORY	EXPANSION DISK	GRADE 9-12	\$29.95
DISCOVERY MATHS MASTER DISK		GRADE 1-7	\$59.95
DISCOVERY SCIENCE	EXPANSION DISK	GRADE 9-12	\$29.95
DISCOVERY SOCIAL STUDIES	EXPANSION	GRADE 9-12	\$29.95
DISCOVERY SPELL MASTER DISK		GRADE 1-7	\$59.95
DISCOVERY TRIVIA 1 EXPANSION DISK		VARIOUS	\$29.95
DISCOVER TRIVIA 2 EXPANSION DISK		VARIOUS	\$29.95
EZ-GRADE (TEACHERS GRADEBOOK)		TEACHERS	\$89.95
FUN SCHOOL 2		AGE 6-8	\$49.95
FUN SCHOOL 2		OVER 8	\$49.95
FUN SCHOOL 2		UNDER 6	\$49.95
FUN SCHOOL 3 * NEW			\$49.95
KATIE'S FARM			\$59.95
KIDS COLLECTION		AGE 3-7	\$59.95
KIDS TALK		5 TO 12	\$54.95
KINDERAMA		PRESCHOOL-6	\$69.95
MAGIC MATH		4 TO 8	\$49.95
MATCH IT			\$49.95
MATH A MAGICIAN			\$49.95
MATH BLASTER PLUS-PRINTS CERTIFICATES	PRIMARY		\$69.95
MATH MANIA		8 TO 12	\$59.95
MATH TALK			\$49.95
MATH WIZARD		AGE 5-10	\$69.95
MAVIS BEACON TEACHES TYPING		AWARD WINNER	\$69.95
MEDAL WINNER			\$49.95
MEMORISE		AGE 3-8	\$39.95
PLANET PROBE			\$49.95
PROBABILITY		HIGH SCHOOL	\$69.95
PUZZLE STORY BOOK			\$54.95
READ A RAMA		AGE 5 & UP	\$69.95
READ N RHYME			\$49.95
ROBOT READERS - AESOPS FABLES			\$34.95
ROBOT READERS - THE LITTLE RED HEN	AGE 4-8		\$34.95
ROBOT READERS - THE THREE BEARS	AGE 4-8		\$34.95
ROBOT READERS - THE THREE LITTLE PIGS	AGE 4-8		\$34.95
ROBOT READERS - THE UGLY DUCKLING	AGE 4-8		\$34.95
SESAME STREET - LETTERS FOR YOU			\$49.95
SESAME STREET - NUMBERS COUNT			\$49.95
SESAME STREET - OPPOSITES ATTRACT			\$49.95
SMOOTH TALKER			\$54.95
SPACE MATH		AGE 8 & UP	\$39.95
SPELL BOOK		AGE 4-6	\$39.95
SPELL BOOK		AGE 7 & UP	\$39.95
SPELLBOUND		PRIMARY	\$59.95
SPELLER BEE			\$49.95
SUM-IT MOUNTAIN			\$49.95
SUNNYSIDE UP			\$49.95
TALES OF THE ARABIAN NIGHTS		AGE 8-12	\$69.95
TALKING COLOURING BOOK		PRE-SCHOOL	\$49.95
THE BIRDS & THE BEES - SEX EDUCATION		AGE 7-12	\$39.95
THINGS TO DO WITH NUMBERS		PRIMARY	\$39.95
THINGS TO DO WITH WORDS		PRIMARY	\$39.95
THREE BEARS		5 TO 10	\$49.95
TRACKERS QUEST		AGE 4 & UP	\$54.95
TRIGONOMETRY		HIGH SCHOOL	\$69.95
WHERE IN EUROPE IS CARMEN		VARIOUS	\$84.95
WHERE IN THE USA IS CARMEN		VARIOUS	\$84.95
WHERE IN THE WORLD IS CARMEN		VARIOUS	\$84.95
WHERE IN TIME IS CARMEN - Mystery		VARIOUS	\$79.95
WORD MASTER		AGE 3-8	\$69.95

NAME: _____ PHONE: () _____

ADDRESS: _____ PCODE _____

✓ PAYMENT : CHEQUE ☐ B/CARD ☐ M/CARD ☐ VISA ☐

[illegible]

Exp:    Signature _____

ALL ITEMS LISTED ARE IN STOCK AT TIME OF DEADLINE AND WILL BE SENT SAME DAY. ALLOW 14 DAYS DELIVERY. ADD \$3.00 SOFTWARE POSTAGE. HARDWARE CALL FOR ARRANGEMENTS. ALL PRICES SUBJECT TO CHANGE.

QTY	DESCRIPTION	PRICE

DO NOT SEND CASH!!

TOTAL =


```

590 X=128:Y=128
592 S1=1+2*(RND(0)>.5):S2=1+2*(RND(0)>.5)
594 SN=INT(RND(0)*3)
600 X=X+5*S1:IF X<=24 THEN S1=1
610 IF X>=343 THEN S1=-1
620 Y=Y+10*S2:IF Y<=50 THEN S2=1
630 IF Y>=229 THEN S2=-1
640 POKE V+16,2^SN+2^SN*(X<256)
650 POKE V+SN*2,X+256*(X>255)
660 POKE V+1+SN*2,Y
670 IF X>90 AND X<130 AND Y>90 AND Y<130 THEN RE-
TURN
680 GOTO 600

```

Notes

1. Line 590 sets the starting coordinates.
2. The RND statements are used with great effect to decide how often a bounce will occur and, when one does, to randomly select which of the sprites 0-2 will move and in what direction.
3. S1 and S2 are the signs of the X and Y movement respectively, i.e. when S1 = 1, the X value will increase and when S1 is -1, the X value will decrease. At the boundary, the sign of the movement is simply reversed. Line 592 randomly sets these to either 1 or -1. The expression $2*(RND(0)>.5)$ is zero if RND(0) is less than 0.5, otherwise it equals -2.
4. The full range of X is used, Lines 640 and 650.
5. Line 670 returns to the main program if the bouncing sprite is roughly near the other two. ☐

GVP HARD DRIVE SALE

All combinations are high performance
Series II with space for 8 Mb RAM

IMPACT 2000 / 40Mb Quantum \$1090
IMPACT 2000 / 52Mb Quantum \$1190
IMPACT 2000 / 105Mb Quantum \$1390

IMPACT 500 / 42MB Fujitsu \$999
IMPACT 500 / 52Mb Quantum \$1250
IMPACT 500 / 105Mb Quantum \$1690

**WE BUY & SELL USED AMIGAS &
PERIPHERALS WITH WARRANTY**

ECS Motherboard upgrade A500 \$180
5112K RAM/Clock/Calender \$89

Sigmacom

48 Jaffa Rd DURAL NSW 2158
Tel (02) 651 3667 (018) 25 7471

KEEP UP TO DATE WITH COMPUTERMATE

Get your favourite magazines (air freighted), hot off the press each issue, by ordering now and paying in advance for 1 years' issues.

Not only do you save, you're also first with all the overseas news.

MAGAZINES

1
YEAR

ACE. All formats (UK) 12 issues	\$126.00
AC'S TECH. Amiga. Inc Disk (US) 4 issues	\$ 96.00
AMAZING COMPUTING. Amiga (US) 12 issues	\$114.00
AMAZING COMPUTING PRODUCT GUIDE. Amiga (US) 4 issues	\$ 74.00
AMIGA ACTION. (UK) 12 issues	\$120.00
AMIGA ANIMATION (US) Inc. Disk (was AX) 6 issues	\$174.00
AMIGA COMPUTING. Inc Disk (UK) 12 issues	\$120.00
AMIGA FORMAT. Inc Disk (UK) 12 issues	\$174.00
AMIGA POWER (UK) 12 issues	\$138.00
AMIGA USER INTERNATIONAL (UK) 12 issues	\$150.00
AMIGA WORLD. (US) 12 issues	\$150.00
COMMODORE FORMAT. C-64/128 (UK) 12 issues	\$150.00
COMPUTE! All formats (US) 12 issues	\$126.00
C.U. AMIGA. Inc. Disk (UK) 12 issues	\$174.00
INFO. Amiga (US) 12 issues	\$150.00
PC HOME JOURNAL. MS-DOS (US) 6 issues	\$ 69.00
PC LEISURE. MS-DOS Inc. Disk (UK) 6 issues	\$ 69.00
PC TODAY. MS-DOS Inc. Disk (UK) 12 issues	\$150.00
RAZE. All formats (UK) (was Games Machine) 12 issues	\$138.00
ST ACTION. Inc Disk (UK) 12 issues	\$174.00
ST FORMAT. Inc Disk (UK) 12 issues	\$174.00
THE ONE. All formats (UK) 12 issues	\$162.00
ZERO. All formats (UK) 12 issues	\$174.00
ZZAP 64! Amiga and Commodore (UK) 12 issues	\$138.00

Get your magazines hot off the press
each month!

Commencing with please send me the next year's issues of:

☐ Cheque

☐ Credit Card No:

Exp. Date: /

□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

Name Signed:

Address

Postcode: Telephone:

**You can also order by phone. Just call 02 457 8388
and give your name, address and credit card number.**

COMPUTERMATE
products (australia) pty. ltd.

P.O. Box C64, Mt. Kuring-Gai, N.S.W. 2080

ACN 002 756443

Tutorial

PART 11

by Andrew Leniart

The number of letters asking for help that have been flooding in to my post office box is pleasing to say the least. So much so that I have decided to take a break from discussing commands this issue and come good with the promise I made in the last issue of ACAR.

This month, the column will be devoted to answering your queries and trying to solve some of the problems that you are having. If you find that you have missed out this time, please be patient. All letters will be covered at some stage eventually.

Shell window

Our first problem comes from Steven McKinlay at Doncaster VIC who writes:

Dear Andrew, Your past CLI tutorials have been extremely helpful so I wonder if you can help me with this small problem. On one of my disks I like to load (or actually leave) a CLI window open on the bottom of the screen after booting up with that disk. So, in the startup - sequence, instead of having endcli at the end of it, I just shrink the window down to a smaller size and display some text in it saying something about the disk or some reminder notes I had put in the startup-sequence last time. In this way the CLI is conveniently ready to use straight away or whenever I need it.

That's not the problem though. What I really want there is a Shellwindow (instead of a CLI) and all the text from the startup-sequence to be displayed in this shell window. Is it possible to do that from the startup-sequence and if so, how?

REPLY: Well Steven, first of all, you neglected to mention whether or not you were using the 1.3 version of Workbench or whether you are still using the old 1.2 version. If the latter is the case, then you can't have a Shell instead of a CLI as the 1.2 version of AmigaDOS does not support shells.

If you do use the 1.3 Version, then

to get a Shell instead of a CLI, then instead of issuing the command - NewCLI - simply make the entry NewShell and you will have it.

In regards to having the text from your startup-sequence appear in this window, then yes, it is possible, but why do you wish to do it that way? Try this out for size - Make a blank space somewhere before the end of your startup-sequence and enter the following commands / lines:

Dir Ram:

Copy Df0:s/startup-sequence Ram:

What this will do is actually create a file in RAM: by the name of "startup-sequence" which you will then be able to view at leisure whenever you choose by using one of the many text readers available in the Public Domain or via the "more" text viewing utility. A lot neater way of achieving the same result and saving yourself the hassle of a cluttered CLI window at the bottom of the screen. Try it, you'll like it.

Corrupt disks

Our next problem comes from Andrew Gormly of Walkerville, SA who writes:

Dear Andrew, When I first bought my Amiga 500 in 1987, a short time later nearly all of my store disks came down with the "Disk structure corrupt" syndrome. Six weeks and \$50.00 worth of CLI books later I managed to suppress the problem and clean all my disks. I have never seen it happen since (except for when I accidentally took my Bards Tale disk out too soon!) I do not know if anyone else has had anything like this, but it spread exactly like a virus does - infecting write-enabled disks when placed in the drive after a warm boot. What was it? How did it happen? And will it come again?

REPLY: The problem you describe sounds suspiciously as though a virus was infecting your disks at the time. Even if you had been checking your disks regularly with a virus checker, the one you were using may not have been able to find it. The reason you managed to stumble across

a fix to the problem could be that by going through all your disks you somehow managed to eliminate the culprit from your disks.

It has happened to others, indeed, it's happened once to me so don't feel as though you are the only one. Whether or not it will happen again depends on how stringent you are with new software that you get.

I find that a good rule to follow is to assume any new piece of software is virus-ridden until proven otherwise. Get yourself a good virus checking program like ZeroVirus by Johnathan Potter or NoVirus by Nic Wilson and check each new disk you get before trusting that it is clean.

Don't forget to check for both file (link type Viri) as well as boot block culprits as both are unfortunately plentiful.

Script files

Moving onto the subject of Script files, Harry Kloppenburg of Thornlie in WA had this to say:

Dear Andrew, Many thanks for your informative articles on the CLI.

There are indeed many glitches, limitations and possibilities in CLI commands that are not directly obvious or explained enough. My particular problem has been with the nesting of commands in a scriptfile.

Is progressive indentation in a script file necessary or just a case of neat programming? I found some examples of nested programming in Abacus books hard to follow (using IF/ELSE/ENDIF or similar commands). One or preferably a few examples of this will be greatly appreciated. Thank you kindly for your efforts.

REPLY: Ok, for the benefit of those that may be a little in the dark on the subject of script files, let's start at the beginning. What is a Scriptfile?

A script file (sometimes referred to as a batch file) is a text file that can be written or created with any text editor like ED on your workbench or even NotePad.

Their purpose is usually to make life easier for you when working in the CLI by enabling you to execute several commands one after the other simply by executing the one script file.

There are a couple of rules which must be followed when writing a script file which might be worth mentioning here.

Continued on p 50

SPECIAL THIS MONTH

CHEAP DISKS !!!

3.5" DSDD IN BOX OF 10

\$8-00 PER BOX

**POWERCOPY -THE POWER TO COPY ALL
THE ULTIMATE BACKUP UTILITY \$30**

**POWERDEVICE-HARDWARE TO UNLEASH THE
FULL POWER OF POWERCOPY \$60**

BOTH TOGETHER \$80

IF YOU THINK YOU HAVE FOUND THE BEST DEAL - LET US BEAT IT!

PCM520 2.0 Mb A500 RAM exp. with 0.5 Mb \$160

PCM501 0.5 Mb A500 RAM exp. with 0.5 Mb \$79

A590 20 Mb Hard Drive with 2Mb RAM \$750

GVP Impact 500 series II 40Mb Hard Drive !!! \$980

**Amiga Computers, Monitors, Printers, Hard drives, Accelerators, Memory expansions, Repairs,
Modifications, Disk drives, Diskettes, Full GVP range - CALL NOW FOR THE BEST DEAL**

PCM COMPUTERS - FOR *ALL* YOUR AMIGA NEEDS

1/1421 High St Malvern VIC 3144

Phone (03) 822 5873 or

018 322 920 9 am - 9 pm

PO BOX 70 Noble Park VIC 3174

Phone (03) 701 0343

FAX (03) 701 0077

OTHER PCM OUTLETS

Standard Computers

105 Mitchell St Bendigo VIC 3550

Phone (054) 416 157

J&S Computers

PO Box 198 Mentone VIC 3184

Phone (03) 580 6883

Northwest Electronics

5/11 McDougall Rd Sunbury VIC 3428

Phone (03) 744 4440

Amiga A500 Starter Kit / 1 Megabyte RAM	920-00	Epson LX-400 80 Column 9 Pin 180 CPS Printer	300-00
Amiga A2000	1540-00	Epson LQ-400 80 Column 24 Pin 180 CPS Printer	475-00
Amiga A2000 Pro Pack	1640-00	Epson LQ-550 80 Column 24 Pin 180 CPS Printer	580-00
1084S Stereo Color Monitor	460-00	Citizen 200GX 9 Pin Color Printer	440-00
Tystar 14" Multisync Monitor	720-00	Citizen GSX-140 24 Pin Color Printer	680-00
3.5" External Disk Drive	165-00	A500 0.5 Mb RAM Exp / switch / clock	79-00
5.25" External Disk Drive	200-00	A500 2.0 Mb RAM Exp / switch / clock / 0.5 Mb	160-00
A590 20Mb Hard Drive with 2 Mb RAM	750-00	A500 2.0 Mb RAM Exp / switch / clock / 2.0 Mb	299-00
40 Meg GVP A500 Series II +8	980-00	A500 4.0 Mb RAM Exp / switch / clock / 20 Mb	380-00
50 Meg GVP A500 Series II +8	1200-00	A500 4.0 Mb RAM Exp / switch / clock / 4.0 Mb	540-00
100 Meg GVP A500 Series II +8	1650-00	A2000 8 Mb RAM expansion with 0 Mb	370-00
50 Meg GVP A2000 Series II HC+8	1150-00	A2000 8 Mb RAM expansion with 2 Mb	500-00
80 Meg GVP A2000 Series II HC+8	1230-00	SIMM Modules for GVP range	2Mb 180-00
100 Meg GVP A2000 Series II HC+8	1350-00	Audio Engineer Software	145-00
Full GVP Range incl. Accelerators		Audio Engineer Software + Digitiser	350-00
Boot Drive, Memory, ROM, NTSC/PAL etc. mods		Genius Mouse (with microswitches)	40-00
All Amiga Repairs			

Firstly, the written file MUST be saved in straight ASCII format. Most-text editors like Ed or Notepad will do this automatically. If you use a word processor to write your script files, then you need to make sure that it has the capability to save the file in Ascii format. Wordprocessors can often put in weird little control codes in files not normally visible to you which cause havoc when AmigaDOS goes to read the file.

Another important rule which 'must' be followed is that an AmigaDOS script file may only contain AmigaDOS commands and routines and nothing else. The reason for this will become apparent shortly. An exception to this rule exists if you have some other (third party) commands which you have obtained in the Public Domain libraries or from some magazine coverdisks or wherever.

What a script file looks like

A very simple script file could look like this:

```
Echo "Script file just executed"
Echo "Wasn't that fun?"
Echo "End of Script File"
```

That's it! If you were to type this useless three liner into your favourite text editor and save the file with a name like "Example" then you would be able to execute it in a Shell or Cli. Type "Execute Example" in a Cli or Shell and the result will be the three lines above being displayed in the Cli window the script was executed from.

In reply to your question on whether or not command indentation is necessary in script files, then the simple answer is no. It depends on your personal taste. Some people like to indent their script files as it makes them easier to follow, for THEM. Others, like yourself, feel differently. Look at the following two examples of a simple startup-sequence. One is written without indentation, the other with. But both would work equally well:

Example 1

```
ask "Load WorkBench? (Y-Yes N-No)"
if warn
echo "Loading Workbench"loadwb
```

```
else
echo "Ok, CLI session then.."
quit
endif
ask "Open a small CLI as well? (Y-yes N-No)"
if warn
newcli "con:0/0/200/50/Newcli"
else
endcli >nil:
endif
```

Example 2

```
Ask "Load WorkBench? (Y-Yes N-No)"
If warn
Echo "Loading Workbench"
LoadWb
Else
Echo "Ok, Cli session then.."
Quit
Endif
Ask "Open a small Cli well? (Y-yes N-No)"
If warn
NewCli "con:0/0/200/50/Newcli"
```

```
Else
EndCli >Nil:
endif
```

Finally, as you can see from the

Continued on p52

Amiga Annual 1991

Produced by the editorial staff of *Australian Commodore and Amiga Review* and *Professional Amiga User*

ESSENTIAL READING

☆ Complete up to date list of software available in Australia with description, price, availability, etc

☆ User Group List ☆ Fish Disk List

☆ Graphics ☆ Word processing

☆ Databases ☆ Hard Drives

☆ Communications ☆ Music

☆ Desktop Video ☆ Multimedia

And lots more !

On sale at newsagents and computer dealers NOW only \$6.95

Or from us for \$6.95 plus \$1 postage.
Send cheque, money order or Bankcard number to
Gareth Powell Publishing 21 Darley Road
Randwick 2031 - Phone 02398 5111



Phoenix

Microtechnologies Pty Ltd
Educational Reseller

All Models

Screen Flicker Filter	\$20.00
Deluxe - Paint III, Video III, PhotoLab	\$99.95

A1000

8Meg Memory Expansion 2Meg	\$499.00
Add per 2Meg RAM	\$200.00

A2000 - Accelerator Special

A2630 Accelerator Card 68030/68881 25Mhz with 2Meg 32 bit RAM	\$1299.00
---	-----------

* Phoenix Board - A1000 Replacement Motherboard

- Includes 1Meg Agnus, 2Meg on Motherboard
A2000 Expan. & Video Slot, 68881 Socket
K/Start & Drive Switches, SCSI Cont. \$945.00

- 1" High 52Meg Quantum H/Drive Kit \$699.00
Inc. Brackets, Data, LED & Power Cables

Canon BubbleJet Printers - with Amiga Drivers Call
Professional Systems & Professional Support

Visa/Mastercard/Bankcard Call or Fax your order or inquiries
Mon-Fri 9 am - 6 pm Sat 10 am - 1 pm

Phoenix Microtechnologies Pty Ltd

18 Hampton Road, Keswick, Sth. Australia 5035
Phone (08) 293 8752 Fax (08) 293 8814



The Australian Amiga User Association Inc.

in Association with *Commodore-Amiga* Computers

PROUDLY
PRESENTS

AmiForum '91'

The Second Annual
Amiga Computer Expo
Saturday 1st. June 1991

Parramatta Town Hall
10am. to 5pm.

Lots of Prizes to be won!



Admission: \$5.00, Children under 16 FREE if accompanied by an Adult
The Australian Amiga User Association Inc. brings you AmiForum 91. At AmiForum you will find:
See the Fantastically Fantabulous 24 bit color Colorbust for the Amiga 16.8 million colors
State of the Art Demos on Graphics, Animation, Multimedia, DTP and Business Software.
Bargains on the Hottest Amiga Software and Hardware from the Major Amiga Suppliers under one roof
See all the latest Hardware and Software for the Amiga all on show ,
Demos From Commodore of the NEW Amiga 3000 and other new Hardware

AmiOz BBS (A SkyPix Graphic BBS) 02 6274442

Australian Amiga User association Inc. Membership Application Form

Name:.....

Address:.....

Suburb..... Post Code:.....

Ph. No:.....Male:.....Female:.....

Age:.....Occupation:.....

Membership joining Fee \$35.00

Annual Renewal..... \$25.00

I authorise The Australian Amiga User Association Inc. to debit
my ☐ Bankcard ☐ Mastercard account for the amount of \$ 3 5 . 0 0

My card number is

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Signature:.....

Expiry Date:.....

I understand I should receive my Australian Amiga User
Association Inc. Membership package within 4 weeks

Signature:.....

Date:.....

Send to :

The Australian Amiga User Association Inc.
P.O. Box 389 Penrith 2750 N.S.W Australia

above, nor does not matter if the commands or text contained within a script file are written in CAPITALS or lower case. Look through previous issues of ACAR for more examples on script files and how to take the best advantage of them. In any case, I liked your letter so a PD disk is on its way for your input.

Redirection

Next problem comes via Penrith in NSW where Michael Davis writes:

Dear Andrew, thank you for your great tutorial on the CLI. It is past the time when this should have been attempted. I have had an Amiga 500 for two years now, and using the magnificent Commodore instruction book I have been totally confused. [AL: Wasn't that the purpose of the book in the first place?]

I am having a problem with two commands, first the redirection. When I enter:

"Type > prt: opt a"
the Amiga responds with
"Error - Unable to open the redirection file"

I ask it why and it tells me that the last command did not set a return code.

The other problem is the "Copy * to prt:" The Amiga says "Can't open prt: object in use" so again I ask Why and get the did not set a returncode routine. I have tried both Workbench 1.3 and Workbench 1.3.2 with ARP installed, with the copy command, I used "Copy * to par:" and this seemed to work ok.

REPLY: I've never struck this problem before and had no luck in trying to reproduce it on my Amiga 500. However the error you are getting in your first problem indicates that the Amiga is having problems locating the printer and the fact that Copy * to par: works ok indicates that the machine is using the Par: device to use the printer rather than Prt:

Try going into Preferences and changing the Par/Serial setting from one to the other and see if that helps. If it doesn't then perhaps some other readers have experienced the same problem and may be able to offer some help?

Fat Agnus

Wally Kerr of West Geelong in Victoria writes:

Dear Andrew, Thank you for your great article CLI Tutorial in ACAR - it has been a great help to me and there must be thousand of others. I am using an Amiga 500 with a 512k expansion with workbench 1.3V.

In your last article in ACAR part 8 about mounting RAD after following your steps I could not after rebooting get a RAD icon. The only way I could bring up

an icon upon boot up was to either copy something to RAD first or DIR RAD in the Shell after which an icon would turn up called RAMBO and not RAD.

Is this normal or am I a novice with the Amiga doing something wrong?

Also can you tell me and others about the new Fat Agnus Chip? I have been told it is in the new Amiga 500 but you must have a modification done inside the AMIGA. What does this chip do and is it worth having this modification done?

And can you recommend any PD or commercial programs for checking the operation of the Amiga. I sometimes have program crashes and Gurus coming up on screen. I have used a memory diagnostic program and have no memory problems. Will a disk drive with dirty heads cause the Amiga to guru?

REPLY: Hi Wally. The problem of a RAD icon not appearing automatically after boot up is almost surely being caused by the fact that your machine is fitted with a 1.2 version kickstart Rom. (Read only memory chip). That's what gives you the insert workbench hand prompt when you first power up your machine. You could take your machine to your local Comcare centre and have the 1.3 Rom fitted to your machine, but a cheaper and easier solution is this:

In your startup-sequence somewhere after you have "mounted rad", simply put in another line with "Dir Rad:" and the problem will be fixed. You can then rename the Rad disk to whatever you like by inserting another line underneath that one which contains "Rename Rad: <Newname>".

If you opt to go for the upgrade chip, then you could have the new Fat Agnus chip fitted at the same time.

The difference between the newer Fat Agnus chip and the one you have in your machine at the moment is actually quite dramatic. The Agnus chip in your machine at the moment can address 512K of Chip Ram. Chip ram is needed for any graphic capabilities on the Amiga including the windows used for workbench etc. It is a totally different beast to fast memory (ram:) that you get when plugging in the A501 memory expansion for example so should not be confused.

Fat Agnus on the other hand has the capability of addressing 1 Megabyte of Chip Ram. With it, you have double the graphic capabilities on your machine than before. ie: You could have twice the amount of windows open on workbench than you could before and not run out of Chip Ram. A highly useful and needed feature if you plan to do a fair bit of work with applications such as *Deluxe Paint*, digitising or similar.

While it is possible to buy a Fat Agnus chip and fit it yourself, a few modifications are needed to be made to your machine so it is highly desirable to have the chip fitted by a qualified computer technician.

As for your last query, yes, it is possible for a disk drive with dirty heads to be the cause of a guru but unlikely if you are not getting read write errors from your disks normally. Rather, I would be looking towards the application I was running at the time of the crash as it would more likely be the cause.

PD diagnostic programs do exist, though I've never used one myself so can't recommend one for you as you asked. The place to look for one would be in a good PD catalogue that lists the various Fish disks and others. There are a few excellent PD distributors around that have a catalogue you could get hold of and check out. Two come straight to mind and those are *Prime Artifax* and *Megadisc* both advertised in each issue of AC&AR.

Printing your artwork

Steven Williams of Gosnells in Perth WA writes:

Dear Andrew, My question concerns computer art, as I have purchased *Deluxe Paint III* and seen the results that can be obtained, is there a way to have good quality prints made? It seems that no dot matrix can achieve this as mentioned in an article by Alan Kirk in your magazine about the Epson LQ860 printer. Then how do you get what you want without purchasing an Inkjet printer, which is way beyond my financial means and most everyone else's. Is to get your work of art as you see it on screen, to paper, an impossible situation?

REPLY: Your problem of getting good quality printouts without it costing too much can be solved by finding a firm or third party which will do it for you. Look for ads in magazines as there are often people advertising a service such as this. A few are Desktop Utilities in Canberra, Megadisc and Prime Artifax.

Alternatively, if you have a modem or know a friend that has one, try posting a couple of messages in echo areas on the bulletin boards asking if anyone would be willing to print your works of art for a reasonable fee. Tried your local user Amiga user group to see if they have access to a printer that will do what you need? Use a bit of imagination and pretty soon you will have contacts all over the place.

Well, that's about it for this month. I think I've just about covered the majority of queries readers have had. While I don't have the time these days to enter into personal correspondence with readers, I will continue to answer as many letters as I can through these pages spread over future issues so please keep them coming.

Till the next time, keep hammering that keyboard. □

The C64 Column

by Owen James

Detachable Keyboard

In the news this month is word of a detachable keyboard for the C64. I haven't heard a great deal about it as yet, except that it has a six foot long cable between the keyboard and the C64 to allow the most comfortable position for typing. I hope the keys are set out like those of a standard keyboard!

The people to contact are:

SER, PO Box 85382,
Racine, WI 53408, USA

The cost is \$US45 +\$3 shipping and handling. No sign of them in Australia - is someone reading this?

Reach your potential

This month I thought we'd take a look at using the C64 to its full potential. Sure, everyone knows about using it for word processing and playing the odd game but that's not all that the 64's good for. Read on and learn how versatile your 64 really can be.

EDUCATION: We've all seen those cute little programs for junior that show flashing numbers, bouncing turtles, and animated bears that have somehow been given the power of rational thought. Great, but how about us big kids? There's a noticeable shortage of educational software for the over 10's, so it's up to us to write our own.

Next time you're studying for the HSC, a diploma, or just coming to grips with learning to program, write down some questions that are related to your subject. Think

about possible exam questions, or questions that you know you would have difficulty in answering. Write yourself a simple database program with the questions and answers in DATA statements. Have the 64 ask the questions and then request an answer in a simple INPUT command. The 64 can keep repeating the ones you get wrong until you get each question correct every time. This is based on the method of 'Socrates', where simple questions are repeated over and over again until any weaknesses are ironed out through repetition of the questions and answers. Simple, but very effective.

CATALOGING: You may have catalogued all of your disks so that you know what files are where, but what about everything else? Use your 64 to catalogue your CDs, videos, or bottle top collection.

Even more productive is using your 64 to catalogue magazines. I get just about every C64 and Amiga magazine I can lay my hands on and, as you could imagine, that adds up to quite a few mags. The only trouble is that when I'm looking for a particular article I can spend a complete weekend searching. My solution was to put together a little program that catalogues my magazines quickly and simply. When I need to look for an article I just type the subject name, such as 'music' and it will give me a complete list of magazine references. I could even be more specific. For instance if I'm looking for a particular programming article that I know was written by Mark Jordan I can choose to type in his name as well to give a more specific list.

Game cheats are also great for this. Catalogue your game pokes etc. When you're finding you're having trouble with Batman, for instance, type 'BATMAN' and have your program give a list of magazine references for pokes.

PERSONAL INFO: Keep a diary? How about computerising it? Using a simple word processor, or even your own software, you could keep track of what you did, when, and where. In years to come, when friends have boxes full of large, bulky, paper-based diaries, trying to work out what to do with them all, you can pull out your two or three disks containing your complete life story and read what you were doing way back in 1991. And if you can

Continued on p56

CLASSIFIED ADVERTISEMENTS

WANTED TO BUY

Train Dispatcher, Super Dispatcher, Super Track Builder, Locomotive Switcher, Northeast Corridor for the C64, disk. Phone 042 29 7556.

FOR SALE

CanDo! \$89; thirty original Amiga games for \$500 or \$25 each or swap A590 HD Phone 519 4355.

Drawing Easy!, Anakin A500 great for artists and animators using ordinary pen or pencils. Works with D/Paint etc. Perfect condition. \$425.
Phone John Seamons on 054 681013.

Games! - TMNT-\$35, It came from the Desert-\$40, Unreal-\$35, Pictionary-\$30.
Phone Lawrence Green on 02 524 9549.

T.M.N.T. - New arcade sensation. Unwanted disks, willing to sell for \$45.
Phone Peter on 042 849 754.

AMIGA PUBLIC DOMAIN SOFTWARE

Over 1700 disks to choose from

No subscription fees

No joining fees

No postage charges

Disks \$3 - \$4 - \$5 each

Send \$3 for catalogue disk

to

AMIGA PUBLIC DOMAIN CENTRE

PO Box 435, St Agnes SA 5097
Phone (08) 396 2163

"Software you CAN afford"

Theme Disks

Anti-Virus PAK	\$14.95
Protect and Eradicate	
ARP 1.3	\$5.95
Faster CLI, more disk space	
Atari Emulator	\$5.50
Runs some applications, plus utils.	
Business 1	\$8.95
Calc, Bankn, Badger, AmiGant, HPll and Loan Calc	
Business 2	\$8.95
Mempad, IRA, DisSecretary	
Calendar and StockBroker	
CAD	\$8.95

Super Workbench 1MB	\$8.95
SID, Dmouse more	
Star Trek	\$8.95
AGATron version. Very good.	
Super Workbench 512	\$8.95
Zippy, Dmouse more	
Text Editors	\$8.95
Wordprocessing	\$8.95
TextPLUS, AmigaFox, Calendar Label Print, PrintStudio Lila, GwPrint and Outliner.	

Graphics and Animation

Ace #06	\$5.50
Ace #09	\$5.50
Ace #14	\$5.50
Ace #17	\$5.50
Ace #18	\$5.50
Ace #19	\$5.50
Ace #20	\$5.50
Artscape	\$8.95
Badge Demo Set - 3 Disks	\$12.50
Busy Bee	\$5.50
Batdance	\$5.50
Cameron Scanner	\$5.50
Crionics	\$5.50
CSIRO Sat-Piccies	\$5.50

HUGE 470+ FISH DISK LIBRARY

See complete list of 200 - 400 in 1991 Amiga Annual

FISH \$5.50

10 or more
\$5.00 each

Compilation of the best CAD in PD	
Communications	\$8.95
JRCOMM, ARC, ZOO and useful tips.	
Communications 2	\$8.95
VAXterm, Hyperdialer etc	
C64 Emulator	\$5.50
Full-blown, more options.	
DOS Utilities 2.0	\$14.95
All the best utils yet!	
DTV Still Store	\$5.95
Still frame playback.	
DTV/Graphics	\$8.95
Abridge, Title Generator, sMOVIE, ImageLab and more.	
Education 1	\$5.50
Elements, SpaceLog, DrawMap etc.	
Education 2	\$5.50
Gravity-well, Planets, Life-cycles, Orbit..	
Hacker 1	\$5.95
PowerPacker, Sound Scanner plus many more.	
Mr Sandman	\$8.95
Digitised sound demo (2 disks).	
MS-DOS theme disk.	\$5.50
Icon driven MS-DOS reader	
Sound Tracker Modules	\$5.50ea.
Four disks available.	

Our Service

Order Processing

Most orders are processed within 24 hours of receipt. You will not be charged if you're paying by credit card until the goods have been dispatched. Orders are sent by surface mail - however, we do have a range of courier services available if you need speedier delivery.

Support

If you have a more obscure problem, write down the error or problem and call for advice. It is best if you can also have the disk or program ready at your computer as this can help us help you quicker. Please use our Support number on (02) 879 7455.

What if it doesn't work?

If for some reason, the disk you buy is damaged - just return it for a free replacement. Please include a short note explaining the problem which occurred and your correct return address, and day time phone number.

Cycle Ball Demo	\$5.50
Digi-Slide Show 1	\$5.50
Digi-Slide Show 2	\$5.50
Dragon's Lair Demo	\$5.50
Epic Demo	\$5.50
Gymnast	\$5.50
Kanakas	\$5.50
Luxo Teenager	\$5.50
Music Mania #10	\$5.50
Music Mania #12	\$5.50
Music Mania #13	\$5.50
Newtek Demo 1	\$8.95
Newtek Demo 2	\$8.95
Northstar Demos	\$8.95
PC87 Slide Show	\$5.50
RGB Hazzards	\$5.50
Soundtracker 5-Set	\$22.00
Space Ace Demo	\$5.50
Stamp Collector	\$5.50
Vaux Killer (1MB)	\$8.95
Walker 1 (1MB)	\$5.50
Walker 1 (2MB)	\$8.95
Walker 2 (2MB)	\$8.95
Walking Cat	\$5.50
Zues Demo	\$5.50

FISH up to 470

How To Order



NATIONAL

(008) 252 879 FREE CALL

Orders Only.

(02) 879 7455 Sydney Metro

Prime Artifax
P.O Box 288
Gladesville 2111



HOT RAY-TRACED

GALLERY 1

The best new HAM
ray-traced images.
View from Workbench.

\$5.50

How to Pay

1. Credit Card - Visa, Mastercard or Bankcard.
2. Send a cheque or money order.
3. Cash on delivery. Collect from your post office and pay them (extra \$4.50 Australia Post charge.)

ORDER FORM

Name

Address

Day Phone

Card No.

Exp Date Visa ☐ B/C ☐ M/C ☐

Signature

PRODUCTS

HUGE
Library

Prime Artifax Public Domain

Amiga-Live Issue Six

\$24.95 (3 disk set)

FEATURE Game

Drip: A full blown arcade game that's very out of the ordinary. It's up to you, as the 'Drip', to rust your way up 15 floors and get the juices flowing again. Avoid running or dripping into the acid, plasma and icecubes shooting out of pipes. You can get a little help from party balloons and bubbles that float by. Drip requires 512k of memory.

Entertainment

BoingDemo: Despite the name, this is not a demo as such - it's one of those try before you buy versions of a commercial game, only this one is very playable. The Boing part is a salute to the original Amiga Boing Demo! In this level and ladders game, you travel about on poles, ladders, teleport points and at all costs avoid the Boncing Amiga Ball!

RollOn: The play is a little like Boulderdash or Emerald Mine. Eight levels are included. To win you need to plan ahead and organise your moves carefully - sort of a joystick strategy. Includes a level editor to design your own games.

SlotCars: A complete working game of SlotCars...just one of four games in the commercial package known as: 4 IN ONE - EASY BUT FUN! The game concepts are simple but addictive. A combination of strategy and dexterity is needed to beat this one.

MoonBase: Adventure/Arcade - guide the shuttle ship to and from the mother ship with the valuable cargo. A multi-level lunar lander.

Strategy

Turn: A strategy game - the aim of which is to produce a given pattern of stones on the board. In order to complicate the game a little bit, all stones around the selected stone will turn either from black to white or from white to black. There are 18 levels available. There's also a pattern editor to design your own games.

China Challenge: Similar to the well known game Shanghai or Mahjong, the target of China Challenge is, to remove all parts of the pile, the so called Dragon, step by step. This dragon is composed out of 120 different pieces. A challenging past time, fun for two players too!

MarbleSlide: You've got to be quick to get this one. This is the fullest extent to which we've ever seen the old magic square theme taken - and one of the best. Slide the sliders to guide the marble home. But your time is VERY limited!

AmiGo: Strategy Board game for one, two or no players!

Workbench

SimGen: How would you like Saturn on your Workbench? SimGen makes your screen look like it is Genlocked. A number of example images are included. Much better than DropCloth or any other of these Workbench background programs. Doesn't slow your Amiga down either!

Flip: This screen gag will drive you nuts. Try it out!

Rocket: Yet another in the great line of Workbench gags. This little number releases a guided rocket which heads straight for your mouse pointer. If you don't move in time, on impact the whole lot explodes. Stick it on a friends Workbench for fun!

Business

Liner: Our serious program for the month. If you develop outlines for speech, writing, essays or reports, this program will help you organise and edit your material in point form - the best way to develop an outline. A fast solid program.

WO: A short and quick utility, which helps you to bring order in your addresses and codes them and saves them (password-encoded) on disk.

Graphics

MandAnim: If you enjoy mandelbrot, you'll love MandAnim. Using a simple tweening process, you can select multiple key areas of a mandelbrot. MandAnim will generate as many steps as you specify between each frame creating an expanded animation file which you can load and animate in Deluxe Paint III. Some impressive graphics can be achieved.

Hennon: You can create some fabulous looking images using this program which lets you explore Hennon mapping. The program produces patterns like the one below using the formula $x = x * \cos(a) - (y - x * x) * \sin(a)$ and $y = x * \sin(a) + (y - x * x) * \cos(a)$. Several example images are included. Full 640 x 400 hires is supported.

plus FREE \$5.50 Graphics or Animation disk of your choice with Amiga Live 6.

Save on Back Issues!

Amiga Live #1 (2 disk set)	\$8.95
Amiga Live #2 (2 disk set)	\$11.95
Amiga Live #3 (3 disk set)	\$18.95
Amiga Live #4 (3 disk set)	\$18.95
Amiga Live #5 (3 disk set)	\$24.95

NEW THEME DISKS!

Emulators and File Transfer

Transformer v1.22 \$7.95
Get into MS-DOS on the cheap. Much faster than the original Transformer. 68030 compatible. Requires MS-DOS on a 720K diskette. No documentation.

MS-DOS Theme Disk \$5.50
Install a full MS-DOS device using a simple install icon. You can then read/write 720K IBM disks and format them too! MSH: acts like any other Amiga device. You can share the selected drive between MS-DOS and AmigaDOS. Full documentation and other useful utilities included.

Atari Emulator \$5.50
Despite the German menu titles, it is possible to put this Atari emulator which runs in low, medium or hires to some use. Will run some applications and can be used to view Atari graphics. Assorted other utilities are included on the disk.

C64 Emulator \$5.50
A very full-blown C64 emulator. Lots of utilities, more menu control and transfer options than previous commercial programs. If you like what you see you'll need to purchase the serial interface direct from the U.S.A. - full details included with the disk. Full documentation on disk.

NEW Educational

Chemistry \$5.50
Chernesthetics allows you create a atomic model of different formulae and visual chemical structures - a great teaching tool.

• SPECIAL OFFER • PD STARTER-KIT

**OVER \$50 VALUE
FOR JUST \$34.95**

Super Workbench	\$8.95
Ready to boot with lots of utilities.	
Anti-Virus Pak	\$14.95
Protects against infection and eradicates over 45 known strains!	
Business 1	\$8.95
Star Trek	\$8.95
(AGATron, full graphics version)	
Newtek Demo II	\$8.95
ONLY \$34.95	
(7 Disks Full • Free postage)	

For the Musically Minded!

Remix 1

Madonna and Blackbox sing out from your 1084S speakers in melodious mega-remixes.

\$5.50

Tracks No. 5

To add to our large collection of Sountracker modules our latest addition including Bond, Fresh House and Wasteland will impress your eardrums.

\$5.50

New Animation and Graphics

Swartz Animation Set

A two disk set of some of the best cartoon-style animations on the Amiga ever seen.

\$8.95

Amy vs Walker Animation

Another Swartz animation to impress you friends.

\$5.50

Ray-Tracing Theme Disks

The best way to enter into the world of Ray-Tracing, DBK-Render allows you to create some amazing scenes.

\$5.50

POSTAGE IS FREE • NO HIDDEN COSTS • FULL SUPPORT

lay your hands on a copy of 'Hey, big mouth!' or another speech synthesis program you could have your diary actually read back to you. And because it's on computer, you won't have to worry about reading your own handwriting in years to come!

How about personal details? I'm sure we all worry about keeping bank account details, pin numbers, and tax file numbers written on paper in fear of them getting into the wrong hands. Keep them stored on computer. Most database programs have a password option if you want to be really secure, but because the details are paperless home users won't have to worry too much anyway.

And time scheduling? Computers are great for this. Plan your time using any one of a number of programs. Appointment Manager, from one of the Suite 64 disk magazines, is great for this. Shame it hasn't got an alarm feature to remind you of where you should be and when! Paper-based time scheduling is messy because no matter how carefully you plan it out there will be changes, re-changes, and re-re-changes, which adds up to one very awkward appointment book. Be efficient. Use the 64!

CONTROLLING EXTERNAL

DEVICES: The 64 can control lights in your house, model railway sets, radios, alarms, and just about anything else that uses a switch. I'll be honest and admit right here that I've never tried to myself, but I've seen many books on doing this using a 64, and even one or two working examples. The Beyond 2000 Science Awards some years back had one entrant using his 64 as weighing scales which gave a digital display on screen. Great ideas that the C64 is more than capable of.

BUDGETING: Not only can you see all your hard earned cash being spent on worthless items, but with a 64 you can see it in FULL COLOUR WITH SOUND! Your 64 won't care about being subtle when it comes to reporting your financial affairs! Watch animated graphs slowly falling towards the zero line. That's the fun of computerised accounting and budgeting.

If you want to be boring, though, you might want to just keep track of cheque numbers, bank balances, and bankcard debts without the bells and whistles. It is more accurate, easier, and uses less paper (who said computer addicts don't care about the environment?).

HOME SHOPPING: Get to know what on-line services are available.

Telecom's Discovery service is great for a number of purposes. 24-hour news, sport, and weather, electronic banking, booking holidays, betting. It's all there. Even some Australian computer magazines have their articles on-line to read or down-load.

ON-LINE FRIENDS: A modem is a communications aid, so communicate with it! Make friends with other BBS users. Get a computerised pen-friend. Use it to meet other people with a computer obsession.

The above short list is just a sample of some of the more interesting things the C64 can be used for. There are thousands more just waiting to be discovered. I'd even heard news about a person linking three C64s together to create a three manual organ. This was nine note polyphonic (that's more than my Technics SX-E8L1). An out of the ordinary use that just goes to show the versatility of the 64.

Letters

Since my article on the MCS 810/820 a few months back I've received word from numerous individuals who say that the situation is much worse than I thought. Here's a sample of the mail:

"...after about one month an unprinted line appeared on the paper. Being a good operator I read the instruction manual which said to clean the head, this did not, however, have any effect. So off to the service agents who tested the printer and informed me that the head had failed and I would have to buy one (\$90.00), as they only have a one week warranty!!!

"Needless to say I was not impressed so I wrote to Commodore who informed me they are a "consumable" (A \$90.00 consumable in a \$300.00 printer?). However, under the circumstances, they would provide me with a new one free of charge, this arrived, was fitted and things returned to normal.

"Just when I'm getting to grips with using it all, you guessed it, the printer head failed again, at nine months.

"I therefore called the Customer Service dept, in Sydney, and had a long talk with the supervisor, who agreed with me, that I had experienced more than my fair share of problems. It was arranged that Commodore would take my MCS 820 as a trade-in on either a Commodore 1230 or Star NX 1000CL.

"I'm sure that if every person who is dissatisfied with his/her printer, wrote to Commodore and complained

perhaps something would be done about it."

*Stephen L. Hack,
Carindale, Brisbane*

Don Dixon, of Port Willunga in SA, had similar problems with the printhead.

Obviously there is a major problem here. I strongly recommend any user that has experienced genuine problems to write to Commodore in Lane Cove, Sydney demanding a solution to the problem.

If you have had similar bad experiences with the MCS 810/820 then let me know of the details. The MCS models were reasonably big sellers so I'll bet that there are more stories of problems. I'll keep you up to date with future developments.

In fairness I should say that I have been the owner of two MCS printers and had only minimal complaints about them.

I should also point out that the MCS 810/820s need special care because they are thermal. If you print too many pages in one session the head is likely to overheat, though there is supposed to be an in-built 'feature' that let the user know when there was a problem such as this. You must also be careful of the type of paper used in it. Rough paper is likely to wear out the printhead faster. Still, this is no excuse for some of the problems outlined above. Let's see what Commodore are prepared to do about this problem.

Tips and Tricks

Space doesn't permit a great deal in this section this month, so just a few quickies.

- Continuing with the theme of the MCS810/820, it has been pointed out to me that not all users realise that thermal fax paper will work with their printer. Many people find fax paper better because it's often cheaper and comes in a roll. I normally use 100 sheet packets of A4 thermal paper which cost around \$13 dollars. I find it's slightly better quality than fax paper.

- The C64 mightn't have an elegant 'print@' feature, but you can still control cursor positioning. Just use `POKE 211,X : PRINT : POKE 214,Y` where X and Y are your coordinates.

- Hopefully I'll have space for more tips and tricks next month. Remember that I'm always on the lookout for tips, tricks, questions and suggestions.

Drop me a line care of: ACAR, PO Box 288, Gladesville 2111. □

Phil Campbell's Entertainment

Screen shots from Pactronics

From this month, you'll notice a great new look in the ACAR Entertainment pages. If all goes well, we will be running screen shots grabbed from most of our latest games with the fabulous Pactronics Action Replay II cartridge. While some Amiga graphics modes can't be grabbed effectively, with most the results are great.

As well as grabbing screen graphics, the cartridge lets you freeze games, examine memory for cheat codes and even modify programs for infinite lives. Handy gadget! For more information about the Action Replay cartridge phone Pactronics on 02 748 4700.

"Gods" from Mindscape UK

This divinely titled new

arcade-strategy game is already getting rave reviews in the UK press. Watch out for it from our local Mindscapers some time this month - and you'll see a review in ACAR soon too!

Sim-City scenarios

Dataflow have just released two new scenario disks for *Sim-City* fans. You'll need a copy of *Sim-City* and at least 1 meg of RAM to run *Ancient Cities* or *Future Cities* - you'll be able to build your own towns in Ancient Asia, Medieval England and the Wild West with *Ancient Cities*, also *Future Europe*, *Future USA* and even a Moon Colony with the *Future Cities* disk. For more information phone Dataflow on 02 331 6153.

Hints disk

Don't forget you can order an Amiga disk contain-

ing text files of all our hints and tips from the last two years. It's packed with good ideas, but you'll need a standard Amiga wordprocessor to read them. To get your copy, send a blank disk, stamped, self addressed envelope and a cheque for \$5.00 (payable to Phil Campbell) to: Phil Campbell, PO Box 23, Maclean NSW 2463.

Hill Street Blues available at last

Good news for fans of TV's *Hill Street Blues*. A game based on the series is now available from Pactronics. Featuring a great intro sequence, with scenes digitised from the show, *Hill Street Blues* looks like a very promising game.

AMOS club hits 1200 members

The AMOS club is a

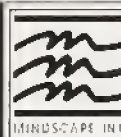
great way to get into the art of AMOS programming. If you've got AMOS and you'd like to join the club make sure you send your registration form - you'll find it in the AMOS box. If you've lost your form, ring Neil Miller at Pactronics on 02 748 4700. When you join, you'll have access to a huge library of AMOS public domain programs, music and graphics - as well as plenty of advice, and a handy monthly newsletter.

Lemmings running hot

Mindscape report that *Lemmings* is now the most popular computer game in the world! While they may be exaggerating a little, the game is racking up phenomenal sales, and it's incredibly popular. With good reason too! If you haven't ordered your free demo disk from Mindscape, do it now! See the coupon on the back of March's ACAR.



MINDSCAPE COMPETITION



S
W
I
V

This month's competition features SWIV - a cryptic acronym for *SilkWorm IV*. The game is the follow up to *SilkWorm*, still remembered as the best Amiga shoot-'em-up ever. We're giving away five copies of the game shared between Amiga and C-64 entries. (Yep -this time C-64 gamers are in luck! There's a SWIV for you too.)

What do you have to do? It's easy. Simply make all the words you can from the letters SILKWORMIV. Each letter can only be used once. Put your entry in an envelope addressed to:

**Phil Campbell, SILKWORM Comp,
PO Box 23 Maclean NSW 2463**

Write your total on the back of the envelope, and post it before June 3rd. That's all there is to it!

Entertainment Letters

To get your views in print, write to: **Phil Campbell, PO Box 23 Maclean NSW 2463**, or fax 066 452060. Remember, that's the address for gaming letters only - anything else goes to the other end of the mag!

Terry's Adventure and Tassie woes

Dear Phil, Would anyone out there in Amiga land have a cheat for Terry's Big Adventure?

Also, is there any way that competition deadline dates could be longer as I would have loved to have entered February's competition, but the deadline was the end of February and we didn't get the magazine down here in Tassie till March 1st, so how could I enter? This happens quite regularly in Tassie, every so often I want to enter your competitions but we have either missed the deadline or only have 3 or 4 days to do the competition and get the letter posted, and that just isn't enough time! So please be kind and take pity on us Tassies who don't want to miss out - see what you can do for us!

Christine Jones
Penguin Tasmania

Ed: Sorry Chris! We've been in a bit of a mess with our competition deadlines lately, magazines have been late because of the Amiga Annual, but we're doing our best to be fair to all our

readers. Generally, we'll try to allow at least three weeks after the release date of each issue - though we need to close in time for the winners to be notified in the following month's edition. We'll keep you posted on replies for TERRY'S BIG ADVENTURE.

Boulderdashing on the C-64

Dear Phil, My friends and I are newcomers to the C-64 and ACAR, and as there is not a lot on the C-64 we have read ACAR well. We are hooked on the game Boulderdash - our collection is "Series Games 1-4" and we have been able to work out the caves after lots of trial and error, except for cave N-zigzag on series 1. Any assistance would be appreciated. We have tried many ways, and time - or the fireflies - always seems to beat us. We are able to let out 2-3 butterflies and turn them to diamonds, but time runs out.

Robyn Whiteman
23 Goddard Cres
Quakers Hill NSW 2763

Ed: If you can help Robyn out of her tight spot, write to her direct, or drop us a line here at ACAR. There must be plenty of top Boulderdashers out there!

Pirates ahoy!

Dear Phil, I'm writing about your attitude to pirates. When you say things like "Ooh! Look at that naughty pirate," they don't stop - they just laugh. You'll never stop school kids handing disks to each other

- but why can't they do something about the big people such as Australian Crackers United?

Maverick,
Croydon Park, NSW

Ed: Boy, no wonder you didn't put your real name on your letter. I don't say "Ooh, look at the naughty pirate!" I say things more like "Ooh, look at the way Cinemaware has just gone broke. Who will be next?" In other words, my main concern as we watch more and more software companies going down the gurgler, is how are we going to support them to the point where they can actually survive in the business? 'Cause if they can't, then there won't be any software left to swap in the playground!

Excellent mag

Dear Phil, This issue, March 1991, which I got just today is my second and I'm already impressed! I like the way your magazine is set out to cover all people's tastes. Well done on an excellent magazine.

I've enclosed a solution to Mark Peterson's problem with Rick Dangerous - but I've got a problem with the very next screen. I can leap onto the first ledge but when I try to leap to the second ledge the missile (or spear) always gets me. Please help - I've tried

everything!

Reading David Bank's letter and the editor's reply about an Amiga disk with Amiga tips and hints, how about one for the C64 (I am a C128 owner, there has to be more than one!) for around \$5.00? If you can do it for the Amiga surely you can do it for the C64!

Adam Wade
Ridleyton SA

PS. Could you please print this letter. I've written letters to other mags like Zzap, C+VG, CU, but with no success. I'd really appreciate it if you did print this letter.

Ed: Let's start at the end and work back. We printed your letter. Congratulations!

Now, a quick reminder to all our readers that you can get a disk full of ACAR hints and tips by sending a blank Amiga disk and stamped, self addressed envelope with a cheque for \$5.00 to the address above.

C-64 users aren't so lucky - all our text files are in Amiga format, and converting to C-64 disks would be time consuming. There would have to be a BIG demand to make it worth the trouble. If you're interested, let us know so we can gauge the demand.

Thanks for your RICK solution. Hope someone does the same for you so you can get through your own sticky problem.

Mindscape "Ultimate Ride" Competition Winners

Congratulations to these winners in the Mindscape Ultimate Ride Word Competition.

- First prize goes to: **Peter Tate** of Goonellabah NSW, with his huge tally of 1046 words. Well done!
- Second Prize goes to **Taffy Jones** of Padbury WA, with 860 words.
- Third to **Ron Kelly** of Kerang Vic, with 767.
- Fourth to Mr M.N. Quan of Mt Pritchard NSW with 747.
- Fifth to **G. Cook** of Wulguru, Qld with 728.

You'll all receive a copy of Mindscape's top class ULTIMATE RIDE for your trouble. And what of Chris Wootton, who usually storms home in our word competitions? A mere 347 words. What went wrong Chris?

ENTERTAINMENT HINTS & TIPS

AMIGA

Send your Amiga hints and tips to Phil Campbell, PO Box 23 Maclean NSW 2463, or fax them on 066 452060.

Xenon 2

Mark Porta, of North Balwyn (Vic) has completed *Xenon 2*, with a high score of 1,107,280 - which means he's very well qualified to offer a bit of advice. Here it is ...

1. If you have autofire, turn it on. In shop 1, don't sell your rear shot. To kill the fish, hit it in the eye.

2. In shop 2, sell the rear shot, buy the double shot and side shot. To kill the Crayfish, go up the side and get the back eyes first. Now go to the next side, and then the front.

3. Don't sell anything in shop 3 - buy a small life. To kill the spider, go up the back and wait for it to move, then fire at the fangs.

4. In shop 4, sell the side shot and buy the laser. Don't stay in the corner when you're attacking the crab.

5. Don't sell anything in shop 5 - buy a life. Stay in one spot as you attack the snake.

6. In shop 6, sell the rear shot and buy the side shot. Attack the dragon from the back.

7. In shop 7, sell the dome and buy the side shot. When attacking the face, first get the eyes - watch out, because they've got lasers.

8. Don't sell anything in shop 8 - buy homing mis-

siles. Hit the gold square to kill the tank.

9. Don't sell or buy anything in shop 9 - go back and kill everything else before you attack the giant space ship.

Thanks for the top class tips, Mark! Hints like this are better than cheats, because the game will still be a challenge - if any other readers have mastered a game, how about sending in a similar "guided tour."

Rick Dangerous

Adam Johnston of Coal Point NSW sends this solution to Mark Peterson's problem with *Rick Dangerous*.

Mark wrote in the March issue saying "I can't get past the Egyptian level where you have to shoot the rock to make the stone fall down for you to climb on and get down to the next section where the spears come out of the wall. I've tried everything possible!" Not quite everything, but Adam agrees it's a tough problem.

"This is the most frustrating point in the game," says Adam, "and I discovered the solution more by luck than by skill." So here's what you do:

"You should have five men when you reach this point as you'll probably lose two or three until you perfect the timing.

"Once you have shot the wall and crawled down onto the ledge, drop down onto the next ledge and immediately duck the spear. Crawl to the right to the edge of the ledge until you're hanging on by your toe nails! That's the easy bit!

"The next bit is where the timing gets critical. Wait until a spear is coming towards you, then stand up and jump over the spear at the last second, landing on the first platform. While the second spear is overhead, run forward. As soon as it has passed, jump again onto the second platform. You should just miss the

third spear. If you don't, try experimenting on the second jump. It's easier if you jump diagonally upwards and then drop vertically downwards. Once on the second platform, shoot the wall to remove the spikes, and you're then almost halfway through level 2."

Thanks for the advice, Adam - just more proof that this is the computer mag with the best quality readers!

Ports of Call

"I'd like to shed some light on Steven McKinlay's problem with *Ports Of Call* described in March ACAR," says the mysteriously named Maverick, of Croydon Park NSW. "It actually isn't compulsory to rescue the life rafts - all Steven has to do is to turn away so he doesn't hit them, and go full steam ahead!" Thanks for the tip, Maverick - but I'll bet there are a lot of little computer guys floating round who wish you hadn't passed on such a mean idea!

More on Rick Dangerous

Adam Wade, of Ridley-

ton SA, also offered to shed some light on the Rick Dangerous dilemma.

"Walk onto the stone that falls down, shoot the left wall (the one where the spikes come out if you walk over to it), squat down a couple of times then wait until it falls. Crawl out before it goes back up and you've done it," says Adam.

Over the Net

"I've got a tip on the game *Over The Net*," says Peter Lawrie, of Cleve, SA. "First, choose a one set game, play the sea-cup and enter one team or two human players. When it's your turn to serve, move the non-serving player up to the top of the court close to the net. This will force one of the computer players to follow him. Now do a jump serve (push up and fire), then hit the ball to the other computer player by pushing right then down. The ball should drop between him and the net and he should miss the ball.

"Hopefully this plan should work. I don't know if it works with the other teams like Coco, Freaks etc but it works with the Rollers and the Golden Boys."

IMMORTALITY or how to live forever in games!

C64

Battle Valley

Surprisingly enough, some magazines didn't like this wonderful game, but I think it's still good even though it's old...Here's a bunch of tips I threw together a while ago, but never did anything with:

- POKE 16371,0 - Disable time
- POKE 26087, (0-15) - Change title colours
- POKE 11612, (0-15)
- POKE 11617, (0-15) - These two change the foreground colour

- POKE 11341, (0-15)
- POKE 11346, (0-15)
- POKE 11351, (0-15) - These three change mid-ground colours.
- POKE 11130, (0-15)
- POKE 11135, (0-15)
- POKE 11140, (0-15) - These three change background colours.

And after you've finished with that lot, type "SYS 25952" to see your technicolour masterpiece!

Ghouls 'n' Ghosts

Personally I don't think this conversion is as good

as its prequel, Ghosts 'n' Goblins, but it's all a matter of opinion.

Here are some tips I whipped up for this game that will help you get to the later stages (which are a bit better). These pokes are for cartridge owners only:

•POKE 11615, X : Where X is the number of lives you want

•POKE 13857, Y : Where Y is the clock speed (1-fastest, 255-slowest)

•POKE 13860,165 : Stops the clock

•POKE 18813,208 : Prevents meanies from hurting you, but still lets you bash the pixels out of 'em!

Ghost 'n' Goblins

Here are some pokes for the classic game itself. Undoubtedly Chris Butler's most triumphant programming effort:

•POKE 2175, X : Where X is the number of lives

•POKE 2198, C : Where C is the colour of the sprites

•POKE 2203, Y : Where Y is the level you wish to start on

•POKE 2214, W : Where W is any of the five weapons (1-5)

•POKE 2240, 9 : Gives you nine minutes to complete a level

•POKE 3901, 0 : Gives you unlimited time

•POKE 4170, 10: Stops sprite collision

•POKE 4242, 42: For smart bomb

•POKE 7086, 10: To make the zombies jump around on Level 1

•POKE 7086, 0 : To allow you to walk through zombies

•POKE 7086, 15: To make the zombies turn into bags when they appear

•POKE 7086, 12: To make the zombies carry you around

•POKE 7086, 13: To make the zombies fool gravity!

•POKE 7086, 1 : To make the zombies turn into spitting plants

•POKE 7488, 56: To make

the plants spit in the opposite direction

•POKE 7777, 0 : Freezes ALL monsters

•POKE 12707, 255 : Speeds up the game by 10!

•POKE 34042, 255 : To make the zombies bring up more pots.

Hmmm, now for a bit about the program that I wrote for this page! This lit-

tle routine allows the user to play the music from just about any game on the market today!

And it explained how to find music in games ... Unfortunately it could not be printed due to space. So if you want to get your hands on this bit of coding, send me a \$5 postal order (made out to Damian Caynes) and

your address, and the disk will be winging its way to you in a few days! The disk also contains demos and a text writer written.

Send any hints and tips, letters, to:

Slartibartfast

4 O'Connor Drive

Bray Park NSW 2484

Hall of Fame

Send your authentic high scores to Phil Campbell, PO Box 23 Maclean NSW 2463. Please mark clearly whether your scores are for C-64 or Amiga. And remember - NO CHEAT MODES ALLOWED!

AMIGA

ARKANOID 976,548
AMAZED 130,500
BATTLE SQUADRON 99,999,999(c)
BEYOND ICE PAL 67,626(c)
BLOCKOUT 85,281
BOMB JACK 200,680
BUBBLE BOBBLE 1,200,460
BUGGY BOY 103,350
CHASE HQ 5,504,010
CONT. CIRCUS 4,529,690
CRAZY CARS 86,064,640
CRAZY CARS 3,000,000,000
CRYSTAL HAMMER 43,847
CYBERBALL 475,000
DENARIS 53,900
DRAGON NINJA 246,400
DOUBLE DRAGON 124,630
ELIMINATOR 246,570
FLOOD 6,455
GEE BEE AIR RALLY 307,466
HYBRIS 1,826,075
IK+ 114,400
IMPOSS MISSION 66,380
INDIANA JONES
SS 1,420,450
KARATE KID II 54,000
LEATHERNECK 86,500
LIVE AND LET DIE 96,520
MAJOR MOTION 50,658
MENACE 996,481
MIDNIGHT RESIST 228,755
MINDWALKER 306,214
MOUSETRAP 71,977
NITRO 233,000 (c)
N. Z. STORY 546,695
OPERATION WOLF 344,800
OUTRUN 26,331,122(c)
OFFSHORE WAR. 626,345
PACMANIA 3,250,140
PINBALL MAGIC 332,390
PINBALL WIZARD 171,150
PIONEER PLAGUE 35,412
PLUTOS 129,450
POPULOUS 307,860
POW 612,865
RAINBOW IS. 781,370
RAMPAGE 111,600
ROBOCOP 375,520
ROTOX 183,050(c)
SIDEWINDER 811,250
SILKWORM (Heli) 1,936,000
SILKWORM (Jeep) 622,500
SKWEEK 2,403,880
SPACE ACE 22,140
SPEEDBALL 17,650

Kamikaze Andy
Chris Turnadge
A. Burbidge
C. Turnadge
Stephen Lark
David Thompson
V. v d Heyden
David Thompson
Angelo Augustis
Amos Burbidge
Kristian Wehner
M. Summers
David Thompson
David Marsh
Peter Evans
Rod Matthews
J. Knight
Greg Munro
Embah Beaton
Kamikaze Andy
Embah Beaton
Scott Southurst
D. Unwin
Phillip Nicoll
A G Smyth
Michael Summers
Shane Crosland
Merekee Beaton
Owen Webster
Kamikaze Andy
A. Augustis
P. Schumacher
David Rich
Andrew Gormly
Embah Beaton
John Boyle
Benjamin Moen
J. Booth
Amos Burbidge
Tracey Chilcott
Aaron Sanderson
Keir Sooby
David Rich
Maverick
David Thompson
J. Beaton
Kamikaze Andy
Michael Summers
Faye Doherty
Amos Burbidge
D. Everton
Daniel Everton
Embah Beaton
Neville Clarke
Amos Burbidge

STARWARS 5,722,822
STRIDER 113,950
SUPER CARS 17 races
SUPER HANG-ON 25,042,850
SWORD OF SODAN 364,750
TEEN.M.N.T. 546,600(c)
TEST DRIVE 131,076(c)
TEST DRIVE 2 309,397
TETRIS 10,101
TETRIS Level 232
THUNDERBLADE 336,520
THUNDERCATS 522,300
TOWER OF BABEL 25,934(c)
TURBO OUTRUN 100,260,819
TURRICAN 1,302,650(c)
TV-SPORTS F.BALL 189-0
TWINWORLD 24,640
TYPHOON 54,255
VIRUS 14,576
WHIRLIGIG 28,210
XENON II 1,107,280(c)
ZOOM 67,051

C. Mingos wave 33
Kamikaze Andy
Maverick
David Worthy
Kamikaze Andy
James Leeken
Jordan Naglet
Charles Edmiston
Cheryl Marsh
Stephen Lark
Rod Matthews
Scott Southurst
Stephen Lark
Matthew Mantle
Stephen Lark
David McKinney
Carol Love
Owen Webster
Amos Burbidge
Nathan Allen
Mark Porta
Steve Jones

COMMODORE 64

BATMAN 473,230
BATMAN 351,570
BANGKOK KNI. 36,800
BOMB JACK 344,560
BUBBLE BOB. 4,409,030(c)
BUGGY BOY 119,510
CHASE HQ 9,220,121
DOUBLE DRAGON 30,660
DOUBLE D. II 255,190
FAST BREAK 136 to 9
GIANA SISTERS 105,200(c)
GRYZOR 203,900
H. MARADONA Level M
HAWKEYE 59,000
IKARI WARRIORS 267,800(c)
INT. KARATE 139,300
LAST NINJA II 34.2 sec(c)
OPER. WOLF 168,789
OUTRUN 6,438,787
PAPERBOY 103,100(c)
POWERDRIFT 779,800
QUE-DEX 639
R-TYPE 1,280,500
RAINBOW ISLANDS 265,840
ROBOCOP 82,250
ROLLING T. 222,740
SALAMANDER 235,300
STREET FIGHTER 127,050
SUPER CYCLE 212,210
TEST DRIVE 36,144(c)
THUNDERBLADE I 734,040
THUNDERCATS 57,500
TARGET REN. 330,450
TRAZ 54,560
UNTOUCHABLES 70,230
WONDER BOY 402,680

John Nunes
Joshua Smith
N. Van Heeswyk
J. Jacobs
John Nunes
John Nunes
Iceman
Joshua Smith
N. Heeswyk
Chris Byrne
Russell O'Neill
Paul Millward
N. Heeswyk
Nick van Heeswyk
Iceman
Paul Millward
But how, Nick?
Kishore Ludbey
Kishore Ludbey
John Nunes
Joshua Smith
Chris Byrne
Joshua Smith
Melissa Warboys
Tim Lockwood
Iceman
Paul Millward
C. Byrne (clocked)
Iceman
John Nunes
T. Morrison
Chris Byrne
C. Byrne
Dave and Sue Upton
Simon Walford
John Nunes

Scores followed by (c) indicate that the game has been completed

Feel like a little horror? You'll need all the intestinal fortitude you can muster up as PHIL CAMPBELL takes on the latest release from Millenium...

Horror Zombies

FROM THE CRYPT!

The wind whips the trees into a frenzy as a jagged fork of lightning crackles through the sky. Count Valdemar turns up his collar against the wind and the rain as he struggles to turn the rusted key in the huge iron gates. The hinges groan as they turn for the first time in decades. In moments, Valdemar is standing at the door of the foreboding stone mansion - his family's ancestral home.

Valdemar had been curious when the Real Estate Agent refused to show him around - but now the hairs prickling on the back of his neck gave him the inkling of an answer. There is something decidedly spooky about the place. A sense of lurking evil.

He's absolutely right - beyond the heavy oak door there's an incredible array of ghouls, spectres, vampires and zombies wandering through the corridors of a house full of false walls, hidden doors and rotating fireplaces. Spooky stuff, but exactly what you would expect from a game called *Horror Zombies from the Crypt*.

Horror Zombies is based squarely

on the B-grade horror movie genre popularised in the 1950s. It's a spooky action adventure spanning six levels, with nearly one hundred action screens on each level - but that's only part of the story. The thing that makes

fireplace. This takes me safely out of harm's way, and lets me grab the dagger hanging on the wall above.

Obstacle number one safely negotiated - now for a real challenge. The scuttling rats in the next room are deadly - one touch from them, and it's back to the title screen. With practice, I finally manage to avoid them and reach the doorway at the far end of the screen, gaining a pair of "tippie-toe shoes" in the process. These are handy - activate them and you can sneak past the meanest spook undetected.

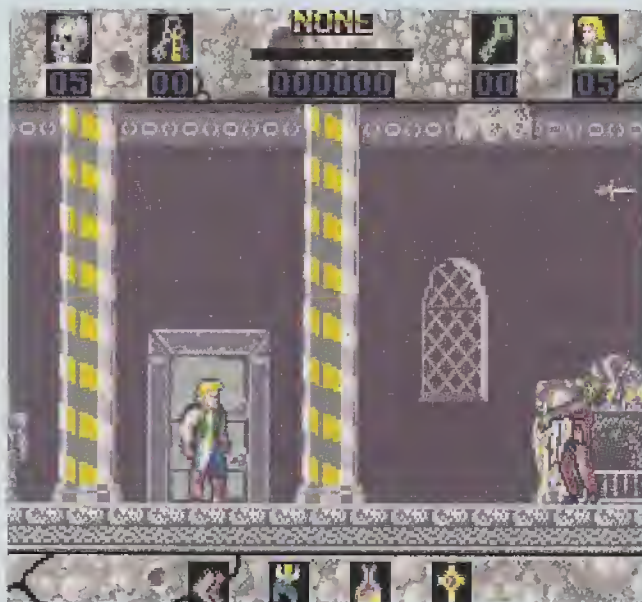
I arrive in the next room feeling a little over-confident. My passage is blocked by a huge, green gargoyle perched just beyond the door.

Horror Zombies so infuriatingly good is the puzzles - almost every screen has a built in brain teaser that will torment you to the point of desperation.

Horror Zombies from the Crypt opens in the cinema. The lights dim, the velvet curtains sweep open across the screen, and the Amiga soundtrack perfectly captures the atmosphere of the era. I roll a few jaffas down the aisle, then reach for my joystick. The action begins.

I am Count Frederick Valdemar, handsome, fearless, and supremely foolhardy. The on-screen Valdemar is well animated - when I say "jump", he jumps, responding instantly to my joystick.

Valdemar is in an ornate drawing room - surprisingly well kept for a house inhabited by spooks. Maybe they're house-proud. To the left stands an uninhabited suit of armour. Let's make that "presumably uninhabited." Suddenly, an eerie green zombie lurches onto the screen. As I soon discover, one touch from this guy leads to a gruesome death. But how do I avoid him? It takes me some time to realise I should follow him for three paces, then leap for the mantel above the



He's deadly - as usual, one touch, and it's back to the start. Next time I know better, and use the special shoes.

There's an identical gargoyle at the other end of the room, so naturally, I do the same. No-one can accuse me of being a slow learner. A frustrating hour later, I realise that Gargoyle number two is actually quite harmless. In fact, you need to push him aside to gain access to the next level.

In spite of many nasty twists like that - or maybe because of them - *Horror Zombies from the Crypt* is a lot of fun. Graphics are detailed, animation is good, and the sound-track will keep you on the edge of your seat. □

Distributed by:

Mindscape
02 899 2277

RRP:

Amiga \$59.95
also for Atari & IBM

Ratings:

Graphics: 78%
Sound: 85%
Instructions: 85%

Overall: 82%



MEGADISC

... when you're thru playing games

Toll-free Number for ORDERS ONLY: 008 22 7418



Megadisc was designed to help you really learn how to use your Amiga. Tutorials, articles, reviews, hints and tips, useful software, and much more are included to help both the beginner and the veteran to use the Amiga more productively.

Not too serious and not too lightweight, Megadisc entertains you while you learn. Available as single issues, subscriptions of any three or six issues (past or future), or as a Trial Pack (including MegaDos, our Amiga Manual-on-Disk and Megadisc 20, and our Catalogue-on-

Disk). If you get a Trial Pack, you can subscribe later for the lower rate mentioned below. Megadisc subscribers get lower prices on all our products, including the largest collection of quality public domain disks (almost-free software). Every Megadisc has the latest Virus-Killer update, and each Megadisc contains as much material as three of four conventional magazines, plus material available only on disk.

• • • • • MEGADISC 21 AVAILABLE • • • • •

The Entire Megadisc Series

- Order Megadisc 1 ~ 20, Megados and four free Public Domain Disks for \$199! That's 25 information packed disks! You can order your PD disks later.
- **AmigaDos Manual-on-Disk**, with all you need to know about CLI, Workbench 1.2, 1.3 and ARP described in layman's terms for \$19.95. Price for current subscribers \$13.95.
- **Trial Pack**
Megadisc 20, Megados, and Catalogue-Disk for \$29
Past and current subscribers ~ RE-Subscribe for less!
\$45 instead of \$50 for a 3-Issue subscription (free PD incl.)
\$80 instead of \$90 for a 6-Issue subscription (free PD incl.)

Public Domain Disks

- For \$4.50 each ~ \$3.50 for Subscribers
All our Disks are fully described on our FREE Catalogue-Disk
Buy 10 PD disks, get one free ~ ie 11 PD disks for \$35 or \$45!
Games 10-Disk-Pack & PD 10-Pack for \$45 each
Our PD collection of 1500 disks contains databases, word-processors, spreadsheets, demos, graphics, and more! All disks are virus-free, and many are unavailable anywhere else.

Send to: MEGADISC, PO Box 759, Crows Nest

Telephone: (02) 959 3692 (all hours) Fax: (02) 959 3525

Contributions of any kind are most welcome ~ please call

*We do not charge for Postage and Packaging, and there are no hidden extras in our prices
We also take BankCard, MasterCard and Visa Orders by Phone or Fax.*

I enclose a Cheque/Money Order for _____ or please charge my Creditcard:

MasterCard/BankCard/Visa No: _____ Exp: _____

Please send me: • Catalogue-on-Disk AT NO COST: ☐ • Trial Pack \$29 ☐ • ANY 6 issues of

Megadisc for \$90 ☐ (please specify) _____ (\$80 for re-subscribers)

• ANY 3 issues of Megadisc for \$50 ☐ (please specify) _____ (\$45 for

re-subscribers) • Megadisc 1 ~ 20 and MegaDos and 4 PD disks ofr \$199 ☐ • The 4 free PD

disks I want (2 in the case of a 3-issue sub) are: _____

OR please send your Catalogue-on-Disk now and I will choose the remaining disks later: ☐

• 10-Disk Game Pack for \$45 ☐ • PD 10-Pack in box for \$45 ☐ • Beginner's Pack (3 Disk Set

for \$29) ☐ • Megados AmigaDos Manual-on-Disk for \$19.95 ☐ • For current subscribers

\$13.95 ☐ • Other Orders: Please attach

Signature _____

Name _____

Address _____

_____ Telephone _____ Date: _____

AMIGANET

Ethernet network for Amigas

- Industry standard Ethernet Architecture.
- Networking software included.
- True peer-peer Amiga Networking - access any screen, hard or floppy drive, serial or parallel printer attached to any Amiga on the network.
- A500 version - ABS injection moulded case connects to expansion port of computer.
- A2000 version enhanced with 64Kbytes data buffer with 16bit datapath assisted by a DMA sequencer. (For high traffic centralised facility or a file server.

AmigaNet A500 \$700.00 (ex tax)

AmigaNet A2000 \$900.00 (ex tax)

GPterm-Amiga V4

Australia's most popular Amiga telecommunications software

- Mouse or keyboard driven, fully multitasking from CLI or workbench, User defined 'configurations' for different services, 110 page manual and more.
- Full terminal emulations for videotex and ANSI/Amiga, IBM, VT100 ANSI terminal emulations for Viatel & Discovery 40/80, Pegasus and other text based services as well as BBSs.
- File transfer with XModem, YModem, full ZModem, SEALink, KERMIT, Punter and ASCII protocols. Batch transfers supported.

Packaged with an extensive manual, not copy protected.

GPterm-Amiga V4 \$99.00

Also available: Amiga and C64 Modem packages, GPterm-64 (videotex and ascii communications for C64/128, rrp \$59.00). Full range of NetComm and AVTEK modems.

Available from your local dealer or direct from

GP Software

Specialists in Amiga Communications

21 Aloomba Rd
ASHGROVE Qld 4060
Ph (07) 366 1402

Fresh from his encounter with a high tech MiG-29, flying ace PHIL CAMPBELL decides to try something at the other end of the scale - a Sopwith Camel...

Blue Max

The wind rushes through my hair as my Sopwith Camel cruises through the peaceful blue skies over France. Taking its name from the pronounced hump over the bulky engine cowling, the Camel is a real beast to fly - stub-

with the enemy - and the force of gravity. So far, gravity is winning every time.

There are various play modes, from dog-fights against a single enemy plane to fully fledged missions.

There's also a "strategy" mode, a unique feature for a flight-sim. Here you pit your wits against an enemy pilot using a combination of a traditional war-gaming "hex-map" and a small panel showing the animated "real-time" view from your plane.

Next time I did better, and managed to claim one victim before I smashed terminally into the turf.

Blue Max will naturally be compared with *Wings*, a similar game released by the now sadly defunct Cinemaware Corporation. *Wings* features an almost identical World War I scenario, and a similar "seat of the pants" approach to the art of piloting. But there are differences. *Blue Max* leans much more heavily towards strategy. And *Blue Max* is more technical, offering a range of accurately modelled World War I planes to fly - planes which are much harder to keep in the air. *Wings*, on the other hand, has the edge when it comes to atmosphere. Graphics are more detailed, and the sound track is more evocative of the era.



by airframe, front-heavy, with a tendency to nose-dive given the slightest opportunity. We're playing *Blue Max*, an accurate simulation of aerial combat as it used to be.

As a simulator, *Blue Max* is realistic - it offers few modern frills, and forces you to fly by the seat of your pants. Strictly low-tech, but the excitement is undeniable, with man and machine pitted in a deadly struggle

It's complex, but it should be rewarding in the end.

Missions start in the air - there's no take off sequence to worry about, though you will need to open the throttle a little before you try any fancy manoeuvres. Controls are simple and direct - the plane climbs when you pull back on the joystick, dives when you push forward, and banks when you push left or right. Climb too steeply and the engine will sputter and die - more than likely, you will too.

My first dog-fight was a messy affair that lasted all of 30 seconds. I was blown out of the sky before I even saw the enemy Fokker Triplane.



In other words, it's a case of horses for courses. If you're looking for a tough game with lots of strategic challenge, try *Blue Max*. If it's softer entertainment you're after, *Wings* has a definite advantage. □

Distributed by:

ECP

075 963 488

RRP:

Amiga

\$69.95



Quick Shots

A quick look at what's new in the world of games



Ilyad is a classic shoot-em-up with real style. And tough! Boy, I can't even make it through the first level - but I intend to keep trying.

Right from the beautifully animated space voyager intro, the game has got real class. Graphics sparkle, enemy ships are fast and smooth, and razor sharp reflexes are the order of the day.

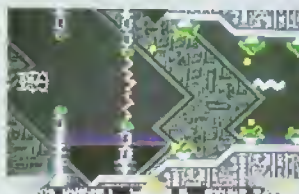
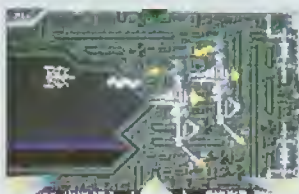
The story, if you're interested, is as follows: Baron Arkhon, a sinister tyrant, has imposed his law over the entire world, thanks to a time machine that lets him send his armies to conquer different eras through history. Your mission is to track down his forces and stop them - to do it, you'll fly horizontally scrolling missions

through the eras of creation, prehistory, antiquity and the middle ages.

Well, okay, I know you didn't need to know any of that. The bottom line is *Ilyad* is a very playable space blaster with classy graphics and a not-too-boring sound track. Highly recommended.

Ratings:
 Graphics 84%
 Sound 78%
 Gameplay 85%
 Overall 82%

Distributed by:
 Questor
 02 662 7944
 RRP Amiga \$T.B.A.
 C64 \$T.B.A.



'NAM

Vietnam. The longest and most controversial conflict in US history. The war that damaged the psyche of a nation so profoundly that only another war could repair it. A political minefield - especially for anyone foolish enough to take on the job of President of the United States of America. That's YOUR job, if you're playing 'NAM. As invading Viet Cong guerillas fight to topple the South Vietnamese government, it's up to you to mobilise air units, set ambushes, protect Saigon - and stay in power at the White House.

'NAM is a strategy game, pure and simple - but a reasonably well decorated one. At the political level, actions are initiated from a main menu - troop commitments, air support and other "budgetary" actions are set in motion by filling in appropriate numbers on the screen. Once approved by the Senate, your decisions are activated at the start of the next calendar year. Game time ticks over at any of three pre-set speeds - and it's essential that you've laid your plans before December rolls around.

Military operations are carried out on a map display - units are displayed as boxes, which can be equipped with helicopters (if you've provided them as

president) and moved around the map. As you collide with enemy forces, the size of your box will diminish as you suffer casualties - the idea, of course, is to obliterate the enemy boxes before they do the same to you.

There are a number of pre-set scenarios, which avoid the political side of the game - take control of forces at Khe San, or in the famous Tet Offensive.

This is a complex game, and you'll need to read the manual before you play. Military strategists will love it - others should approach with caution. Graphics are a direct port from the Mac version, and while they're obviously fine on the higher Mac screen they lose a lot in the translation. Richard Nixon's ugly mug is almost unrecognisable. Maps and other screens are much better, and overall the game presentation rates an okay.

Ratings:
 Graphics 68%
 Sound 71%
 Gameplay 82%
 Overall 73%

Distributed by:
 Questor
 02 662 7944
 RRP Amiga \$89.95



PRO TENNIS TOUR 2

Pro Tennis Tour was one of my all time favourite sport sims. The controls were fast and natural - so much so that you could almost imagine yourself running round the court. Now there's a sequel. *Pro Tennis Tour II* has a number of new features - for a start, you can create and save your own player. You can play almost any stroke, with increased options like lobs and smashes, and players can now move around the full area of the court.

The default game is a women's singles match, and the ladies certainly move round the screen with ease and grace. As soon as you pick up the joystick, you feel you can play - it's even more user friendly than *Pro Tennis 1*.

Creating your very own

Boris McEnroe is easy. A menu screen lets you set skill values for eight specific strokes - you start with 80 skill points to share around the strokes, and can only build up your characteristics by practising and playing matches.

Pro Tennis Tour II is hard disk installable - and it's already earned itself a permanent place on my dh1!

Ratings:

Graphics: 83%
Sound: 82%
Gameplay: 86%
Overall: 84%

Distributed by:

Questor
02 662 7944
RRP Amiga \$69.95
C64 \$ T.A.B.



FISTS of FURY

It may be nothing new but what a great little package - a veritable box full of action. What I am talking about is *Fists of Fury - Edition 2*.

Fists of Fury has a decidedly oriental flavour and just a touch of the light-hearted. All in all there are four games in this package, *Shinobi*, *Ninja Warriors*, *Double Dragon II* and *Dynamite Dux*. All those names should be familiar to lovers of action / violence / beat-the-life-out-of-the-other-guy games.

If you're one of the few who are not familiar with these games, here's a brief rundown.

Shinobi - A group of children have been kidnapped and your mission (should you decide to accept it) is to rescue them - the use of excessive violence is encouraged.

Ninja Warriors - I'm not sure if there is a point to this game. It seems that you just have to be as violent as possible and your score goes up.

Double Dragon II - Marian has been killed and Billy and Jimmy have not taken

her death very well at all - in fact they are out for revenge. There is even a chance that if they are successful then they will be able to bring her back to life. Again violence is the order of the day.

Dynamite Dux - this is the kind of game you would be happy for your younger brother or perhaps even your parents to play. Lucy has been kidnapped and your job is to get her back (sound familiar?) The really cute part about this one is the way these guys punch. They make Mike Tyson look like he isn't really trying.

Luke Tattersall

Ratings:

(average for all four games)
Graphics - 76%
Sound - 65%
Gameplay - 78%
Overall Value - 82%

Distributed by:

Mindscape
02 899 2277
RRP Amiga \$59.95
C64 disk \$39.95
C64 cass. \$29.95



"An absorbing diversion for players with an eye for detail." Thus spake DAVID GLOVER as he assessed this new Amiga game...

ZARATHRUSTA

Alright Space Cadets, here's the scenario: The Resistance (that's us) is about to launch a major offensive against the Empire (that's them). In preparation for this, the Resistance have captured several star ships, but are lacking the essential power sources for these formidable craft, Klystron Pods.



Your mission is a simple one (in theory). Working for the Resistance, you are required to steal the pods from the Empire's storage planets. You must find the pod, hover just above it, activate your ship's tractor beam until the pod hooks on and

then thrust away skyward to the good ol' Mother Ship. Easy, eh?

There is at least one pod on each planet, either on the actual surface or cunningly tucked away in a cavern. The first trick is to simply find the thing (they look like spheres resting on plinths or monuments) and get a hold of it. Then it's "pedal to the metal" as you blast away to the sanctuary aboard Mother who will take you immediately to yet another planet where you start your search anew.

This has to be one of the most painstaking computer games I've played. You have a full screen in front of you: the programmers (the Whiz Kidz - based in Europe) have thankfully used the PAL format - no missing third of a screen! Your ship appears as a small on-screen sprite floating in the black abyss of space somewhere above the planet.

A dab of thrust here, a tweak of steering there, and you'll be gliding and hovering to your heart's content. But beware, successful flying calls for the coolest and most sensitive

of hands. The controls are very touchy indeed. The slightest mistake or over-correction will see you plummeting to your doom on the planet's surface.

Negotiating the caverns requires absolute surgical precision - it's almost like threading a needle sometimes. The job is not made any easier by the presence of a huge variety of what the manual calls "Obstacles" - 15 different types in all - some passive, some active and some downright 'ornery. The "obstacles" become more prolific and obstructionist as the game progresses over its many, many levels.

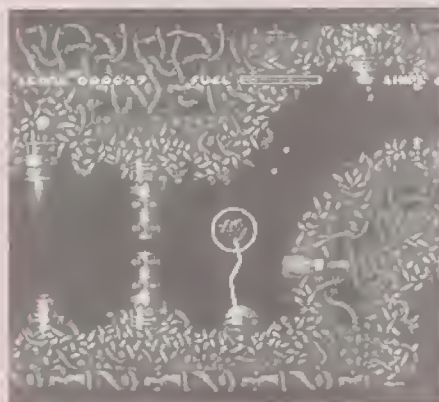
A blessed relief is the absence of a time limit, although you have a finite supply of fuel (refill tanks are avail-

ble on the planet) and six space ships (lives) to play with. A small indicator panel at the top of the screen gives you the score and an up-to-date status on your resources.

You and your ship are not entirely defenseless. In your arsenal are Plasma Bolts, your main form of attack, and a Laser Scanning Device (LSD) which scans the cavern walls and destroys all enemies. The LSD is very effective, but also heavy on the fuel bill. Using the LSD with manic glee, I found to my dismay that it bled my tanks dry and I made an "uncontrolled flight into the ground".

Graphics on *Zarathrusta* are adequate, though unspectacular. Sound effects are good and loud, although a little sparse at times. An excellent sound track runs during the title screens only. Control options are either joystick or keyboard, although I found the latter far more effective.

Zarathrusta is for those with patience and perseverance, with a



steady hand and a cool head. It takes co-ordination, anticipation and a keen mind. Trigger-happy space cowboys looking for an *R-Type* or *Xenon II* will be disappointed, since this game is simply not designed for that sort of action.

While *Zarathrusta* will not go down in history as an Amiga games classic, it's an absorbing diversion for players with an eye for detail and sensitive touch on the throttle button. □

Ratings:

Graphics: 78%

Sound: 76%

Instructions: 82%

Overall: 79%

HEWSON

Blitzkrieg - Battle at the Ardennes is just one in a series of Wargames being distributed by a new UK publisher called "Storm Computers Ltd" - keep your eye on them. Wargaming and simulations are increasing in popularity and becoming increasingly sophisticated.

Of course, these games aren't for everybody! *Blitzkrieg - Battle at the Ardennes* appeals to those with above average intelligence, razor sharp minds, brute cunning, and an appreciation of good timing and patience. *Blitzkrieg - Battle at the Ardennes* simulates one of the most decisive battles of World War II. On December 16th, 1944, coinciding with several days of bad weather, Hitler ordered directive "Wacht am Rhine."

The German plan was to strike weakened Allied lines in Belgium and Luxembourg and to break through and push quickly to the Meuse River to capture Liege and finally the the port city of Antwerp. The capture of Antwerp was essential to postpone the invasion of Germany, and give the Fuhrer a chance to honour his promises of secret weapons that would win the war. But the chances of success were remote. The Germans were desperately low on fuel and the Allies had firm control of the air, and strategic superiority in Europe.

One player, as either the German or Allied forces, can battle against the computer, or two players can face each other. There are a number of variables that can be set at the beginning of the scenario - such as the standard of intelligence reports, relative condition of forces and the weather in which the battle will be fought - to eliminate any unreasonable advantages between players or computer, and to provide an infinite range of battle conditions.

The map or battlefield is an area composed of 1700 hexagonal cells (hexes). Each cell is assigned a terrain type of mountain, plain, forest, city or Siegfried line. As the attacker, one moves his units around the map encountering and engaging units of the enemy. The various types of units - infantry, artillery, light and heavy armour - have combat strengths and movement abilities associated with them, which are modified by the terrain.

It is essential that you keep an eye on the terrain and your supply lines as you move about. Whenever a

Bored with board-based war games? Then this is just what you've been waiting for. Join ANDREW BAARTZ as he takes on the allied forces at Ardennes ...

unit is adjacent to an enemy unit it can engage in combat, and a surprise encounter while you are vulnerable is usually disastrous. *Blitzkrieg - Battle at the Ardennes* is simulations of a board game. If you've ever played these type of boards games - you'll find a computer version just heavenly. No more tables to look up. No more fiddly calculations. Truly secret moves! Possible move options highlighted in advance. Realistic use of terrain and intelligence. Warnings over illegal moves. And no disputes! (Because the computer's decision are final). Just the mention of these advantages will bring tears of joy to wargamers' eyes.

I'd never played the particular board game on which *Blitzkrieg* was based, so it took me about an hour to really get into the game and a bit of time browsing through the manual. I am glad I persevered - because soon I was leading the German assault towards Antwerp. The Allied airpower gave me a bit of a hammering, but the overcast days protected me and my forces surged forward. Capturing petrol dumps and cities. Organizing V2 raids. And hoping for more overcast weather. Eventually my troops marched on the objective. The actual fight for Antwerp was long and bloody, but victorious.

Blitzkrieg is a winner. These military games are a sort of "Ultra-Chess." The challenge is irresistible! □

Blitzkrieg at the ARDENNES!

Distributed by:

Pactronics
02 748 4700

RRP:

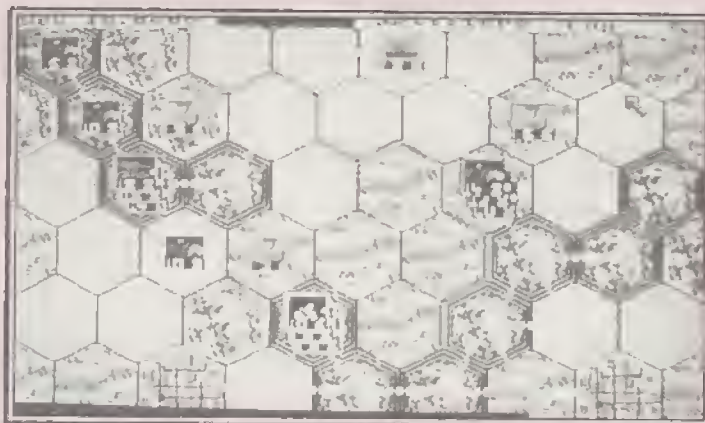
Amiga \$59.95

Ratings:

Graphics: 62%
Sound: NA
Instructions: 88%

Overall:

81%



4 in One Compilation THE GAMESMEN M E G A P A C K

This is a review of a compilation package of software called *Mega Pack* from Sydney company "The Gamesmen." *Mega Pack* combines two car racing games, an arcade movie spin-off and a golf simulation.

•Number 1 - *Jack Nicklaus' Greatest 18 holes of Major Championship Golf*. Like the car games, this golf



THE DUEL

simulation comes from Accolade. It's a couple of years old now, and not quite as polished and detailed as *Greg Norman's Ultimate Golf*, but still an excellent simulation that's fun to play. There is enough variety in the game to keep you interested for many long hours.

You choose whether you are male or female, beginner or expert. There are Pro, Mens, and Womens tees on each hole. For beginners the computer automatically selects a club for

you, though you may change it if desired. Pros must always make their own choice.

You can play alone, or with a combination of several human and/or computer players. You have a choice of two real golf courses and an imaginary course made up of Jack's favourite holes. Games can be saved and resumed later.

Jack Nicklaus' Golf is great fun to play, especially with a friend (or friends).

• Number 2 - Now for my least favourite, *Ghostbusters II*. Perhaps it's because I didn't see the second movie, but I don't seem to be able to get the hang of this one. And I mean hang. That's where you start. You're on a rope, about to be winched through a manhole into the spooky depths below the streets of Manhattan. Your object is to make it through all the ghosties to the bottom of the hole and collect a sample of slime. I get to the bottom all right - at terminal velocity!

If you get through this section, there are two others, which no doubt make sense to you *Ghostbusters II* fans, but it's all Macedonian to me.

Now the car games. First is *Test Drive II: The Duel*. It's almost identical to *Test Drive I*, except you can choose to "Duel" with another car. You get a view of your instrument panel and the road ahead through the windscreen. You can also see the road behind in your rear mirrors. The steering wheel turns in the appropriate direction as you move the joystick.

There are some nice opening graphics and SFX. You get a choice of cars, including the

Porsche 959 and Ferrari F40. There are 12 skill levels, from beginner to expert. You can buy disks with extra scenery and cars.

The other racing game is *Grand Prix Circuit*. It operates exactly like *Test Drive*, except you pilot a formula one racing car around a Grand Prix circuit. The lower of the 12 levels have automatic gear changing. At expert levels it is possible to blow up



GHOSTBUSTERS

your engine, spin out, or do other damage due to bad driving.

You can decide how many laps in each race, and what type of car you drive, plus choose to drive in individual races, or the whole Grand Prix Circuit.



GOLF

With budget packs like this, you can't expect the year's latest releases. But what you do get is last year's great games, or this year's ordinary ones. With that in mind, *The Gamesmen Megapack* is good value. Both *Test Drive II* and *Grand Prix Circuit* are excellent games with a lot of attention to detail. The golf game with the long name is also a lot of fun. *Ghostbusters II* isn't great, but it's playable. So if you can only afford one game, why not buy four instead?

Distributed by: (exclusively)

The Gamesmen
02 580 9888
491 Forest Rd
Penshurst NSW

RRP:

Amiga	\$59.95
C64 cass.	\$29.95
C64 disk	\$39.95
IBM	\$59.95

Ratings: (Average)

Graphics:	74%
Sound:	73%
Value	87%
Gameplay	76%

ACCOLADE

ACTIVISION



GRAND PRIX

PHIL CAMPBELL takes control of the latest in Soviet military hardware as he checks out the flight-sim we've all been waiting for...



fortunate "accident." Apology accepted, but it's up to me to arrange a few accidents in return. Next time they fly over the border, I'll be ready.

Taking off is easy - once you know how. Simply open the throttle, release the wheel brakes and you're trundling down the runway at an alarming speed. Pull back on the joystick and your nose rises gracefully into the air.

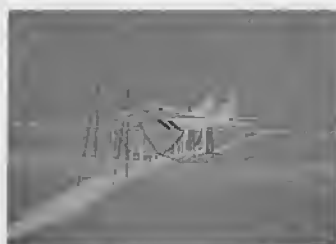
The manual strongly recommends controlling your MiG with a mouse - simply pretend it's the top of a control stick, and move it accordingly. "A switched joystick," says the manual, "provides a crude but intuitive way of controlling the plane." Suits me fine - I'll trade crude for intuitive any day. If you're flying the IBM version, you'll be using a standard analogue joystick - probably the best option of all.

Moments after take-off from Tbliski, I'm flying high above the famous Great Wall. From this height it's more like a great line - just a black trace against the green of the earth. Suddenly, two Chinese planes appear - yellow blips on the dark face of my radar screen. Selecting my AA-8

Even though Soviet military hardware copped a fair hiding in the Middle East, there's still a lot of interest in the MiG-29 *Fulcrum*, a nimble jet fighter producing speeds of Mach 2.2 at an operational ceiling of 16,800 metres. There's been an equal amount of interest in MiG-29 *FULCRUM*, the latest flight simulator from Domark software. My mate Ken Simpson is literally begging for the chance to try it out - and he will, just as soon as I've got it licked.

slide manoeuvre described in the manual. As usual, I had trouble even getting off the ground - so the fancy stuff can wait.

Cockpit instrumentation is completely authentic, and quite different in concept to the Western equivalent. The "Artificial Horizon and Turn" display, for example, shows your pitch and roll on the same dial, while the attitude meter features a moving plane silhouette on a fixed background - the western version features



The trouble is, MiG-29 has a host of features, and a learning curve almost as steep as the 80 degree tail-

a fixed plane symbol and a moving background. Regular flight-simmers will find this a little off-putting at first.

After a quick stint in the training academy, I was keen to try a full scale mission. Never mind the fact that I failed the training session - real pilots might train for a full year, but they only have one life to play with. I can afford to be cocky. There are five missions to choose from, each with an authentic Soviet feel. I chose assignment "Yellow Dragon," a sortie in the skies above the Great Wall of China.

Chinese Shenyang fighters have been illegally intruding on Soviet airspace towards Tbliski aerodrome. When an aging Soviet Su-21 fighter challenged them yesterday it was shot down. The Chinese ambassador sent his deepest regrets for this un-

"Aphid" air to air missile, I lock onto my target and hit the fire button. Moments later, there is a puff of smoke on the horizon. Moments later again, I plough nose first into the ground.

Rule Number One. Don't watch puffs of smoke on the horizon. Watch your altimeter.

MiG-29 *Fulcrum* is a solidly built flight-sim, with plenty of features to play with - including "missile-eye views" of the action, just like the "slam-cam" coverage of the Iraqi decimation. On the Amiga version, graphics and sound effects set no new standards - adequate, but not brilliant. Even so, they don't spoil the flavour of the game.

Versions of MiG-29 are available for the Amiga and suitably souped-up IBM compatibles. □

Distributed by:

Questor
02 662 7944

RRP:

Amiga \$79.95
also available for IBM

Ratings:

Graphics: 78%
Sound: 77%
Instructions: 79%

Overall:

78%

DOMARK

Adventurers

Realm

by Michael Spiteri

Welcome once again to the dark caverns of The Realm - the place where adventurers all over Australia turn for help in their quests. If you are stuck in any adventure games, send your problems to the following address:

**Adventurers Realm, 12 Bridle Place,
Pakenham, Vic 3810**

If role-playing-games (RPG's) are your kettle-of-fish then give Kamikaze Andy (alias Andrew Phang) a bell at:

**The Dungeon P.O.Box 315,
Maddington, WA 6109**

Always enclose a stamped addressed envelope when writing to the Realm.

Realm Chit Chat

Firstly a very big thank you to:

- Stuart George (Springvale, VIC)
- Michael Bathols (Narrogin, W.A.)
- Michael Walsh (Horsham, Vic)
- Kathy Kupresak (Bonython, ACT)

for the enormous amount of hints sheets, solutions and tips kindly donated to the Realm. I am sure they will get many adventurers out of a sticky spot.

David Upton suggests that adventurers should exchange with each other completed adventure games. Sounds like a good idea, but I'm not sure it will do the deteriorating Aussie software market any good. I can't see any problems if the games are no longer available, though. What do other Realmers think?

\$1000 is what you can win by solving the C64/128 graphic adventure game - *Space Explorer*. The challenge has been set by Gary McCleary Software. Watch for the advert.

Also, there are continuing pleas for *The Official Adventurers Realm Hint Book*. It is out soon for only \$9.00 at most newsagents and computer dealers. If you cannot seem to find it, ring (02) 398 5111.

Adam Read of Morphette Vale is shifting to England, and wanted to know if the magazine is available there. I don't think we have reached that far overseas....yet, however if you ring up Darrien Perry (thats a girl) on 02 398 5111 before you leave, I am sure a subscription could be organised.

Free Hint Sheets

As promised, hint sheets for *Castle of Terror* and *ZZZZZZ* have been dropped from the list of free hint sheets. There are still a couple left over if you desperately need them.

With two hint sheets out of the door, we now have room for even more new hint sheets:

Zak McKracken and Indy (Jones) .

Yes folks, the Lucasfilm games have been puzzling adventurers from all over Australia, so it seems fitting that these hint sheets are made available. You can thank Kamikaze Andy for the *Indy* hint sheets, and many many adventurers for the *Zak* hint sheet.

Readers of the Realm are entitled to up to four different hint sheets, as long as a stamped addressed envelope is enclosed. The only address to write to for hint sheets is:

Free Hint Sheets, 12 Bridle Place, Pakenham, Vic 3810

Guild of Thieves, Jinxter, Pawn, Zork I,II,III, Maniac Mansion, Bard Tale I,II,III, Hitchhikers Guide, Faery Tale, Hobbit, Never Ending Story, Fish, Deja Vu, Uninvited, Dracula, Borrowed Time.

CLEVER CONTACTS

More brainy adventurers to add to the ever-increasing list of adventure clever contacts. Always enclose a stamped addressed envelope when writing to a clever contacts.

Michael Walsh is a temporary contact until he starts uni next year. His address is:

P.O. Box 136, Horsham, Vic 3400. He can help in: Zork 1-3, Stationfall, Planetfall, Starcross, Lurking Horror, ZZZZZ, Rigers Revenge, Baslow Manor, Adventureland, Pirate Adventure, Secret Mission, Pool of Radiance, Azure Bonds, Silver Blades, Hulk, Spiderman, and Dracula.

Bruce Gilbert of 88 Woodward Circle, Marangaroo, W.A. 6064 can offer help in: Larry 1,3, Shadow of Beast 1,2, Dejavu, Maps for Dungeonmaster, It Came from Desert, Ghostbusters II, Operation Stealth, Police Quest II, Heroes Quest, Mean Streets, F19 Stealth Fighter, Immortal, Dragons Lair, KingsQuest 1,3, Space Quest 1,2, Uninvited, Shadowgate, Dreamzone, and Zak McKracken.

Finally, a very big thank you to out clever contacts, the unpaid workers who provide an excellent service to our readers. Good one, guys!

Help, Help & more Help or the Smart Adventurers Dept.

Many thanks to all the contributors to this section of the magazine. If you were stuck a little while back, then instant relief could be below!

Game: Aztec Tomb Adventure
For: Mark Bilney (Feb issue - disguised as Jan issue).
From: Shelley Duval
Help: The rope can be found when you are still at the beginning, in the house. Go ladder, get chest, down, s, n, look bed, go trapdoor, look, get cloak, wear cloak, examine cellar, get key, open chest, get rope, get sword.

Game: Ring of Power
For: Mark Bilney (Feb issue)
From: Shelley Duval
Help: The game only flashes the password on and off just the once, and only if you start the game from scratch. Sometimes it won't show it at all. However, when on the final level you go to the shopkeeper in the far bottom right hand corner, he will reveal the password.

Game: Neuromancer
For: Colin Smith (Feb issue)
From: Alex Stivala and Stuart George
Help: At the start of the game, use the PAX to send a message to Armitage which simply contains your ID number, and he will deposit 10000 credits in your account.

Open an account with the Bank of Zurich (link code Bozobank) then use the Tactical Police database to have Larry Moe arrested, so you can get to the Panther Moderns meeting room and talk to Lupus. Ask him about Gemeinschaft, and he will tell you an account number which you can use to transfer money from Bank Gemeinschafft to your account (link code Bankgemein).

Register yourself as an employee with Hosaka to pick a week's salary, and by using the cyberspace database you can get 500000 from the Bank of Berne.

Game: Asylum
For: Scott Pitcher (March issue)
From: Alex Stivala
Help: To stop the exterminator from

fogging the pestilence, you must tie him up with the rope. The rope can be found in one of the corridors.

Games: Pro-Pack Adventurer Games
For: Brian Blackwell Jnr (Feb issue)
From: Stuart George
Help: In Temple Curse, to cross the pool, just say ROW and a direction.

In Last Planet, to look at the drawing try climbing the stalagmite. To get the rope you have to cut it. In Island of Spies, get the parachute, wear parachute, pull lever, pull ripcord, remove parachute, and crawl out.

Problems, Problems & more Problems or the Troubled Adventurers Dept.

The Realm received a handful of problems this month, with games that until recently have been unfamiliar among these pages. If you can help these poor souls out - please do!!

- Tony Pappas of Finley in NSW is stuck in *Strangeloop*. First of all, he would like to know how to get the Robot Manual from the litter Anti-Matter Man without getting killed. Also, what does he have to give the robot that waffles on about putting out brief candles?

- Julie Stearman of Blaxland in NSW wants to know how to deal with the Great Head in the game *Wizard of Oz*. Julie says at this stage of the game the parser becomes hostile.

- Getting out of the house is the problem facing Matt and Luke Walsh of Alphington in Victoria. The game where this house exists is *The Jetsons*.

- Jim Fang of Brentford Square in Victoria asks if anyone can help get past the Air-Level in the game *Moebius*?

- Lisa Ferraro of Mt Gambier is South Australia is really stuck deep in the *Black Cauldron*. Firstly, what does she do after the Gwydant has taken the cauldron? What does she do at the castle other than freeing the princess and the prisoner? What else does she do with Guigi other than give him cookies? Finally, what is something else she can give the witches besides the sword?

- Axl Batroc is having lots of trouble in *Neuromancer*. Trying to get Comlink V6 is becoming a real headache for Axl.

KICKBOARD
HOLDS BOTH YOUR KICKSTART ROMS
IN ONE EASY TO FIT QUALITY BOARD
WHICH IS SWITCHED EXTERNALLY
TO SUIT **KICKBOARD \$39-90**
A500/2000

TRANSBOARD
USE YOUR EXTERNAL DRIVE TO BOOT
OFF, SWAP INTERNAL V's EXTERNAL
JUST SWITCH AND RE-BOOT [Ctrl-A-A].
eight wires - requires good soldering ability.
12 MONTH WARRANTY ON BOTH BOARDS **TRANSBOARD \$49-90**

Phone orders by Mastercard / Bankcard welcome
Post & handling add \$3-60 anywhere in Australia
order today - despatched today by Australia post
Proudly manufactured in Australia by Unitech
UNITECH ELECTRONICS PTY. LTD.
AUSTRALIAN COMPANY NUMBER 003864042
ESTABLISHED 1978
INDEPENDENT REPAIRS TO COMMODORE PRODUCTS
PHONE: 02 820 3555 10am-6pm
P.O. Box 137, MINTO, N.S.W. 2566

The Official Adventurers Realm Hint Book

➔ Hints and tips on more than 40 games, by Michael Spiteri, whose "Adventurers Realm" appears every month in this magazine.

**Only \$9.00 from
newsagents and
computer dealers**

Or from:
Commodore and Amiga Review
(02) 398 5111

**Essential reading for
adventurers -
get your copy now!**

AD. INDEX

Amiga P D Ctr	53	Megadisc	40, 62
Briwalk	17	Millersoft	6
Brunswick	6	MVB Computers	7
Classified Ad's	78	P C M Computers	49
Commodore	36, 37, 51, 21	Pacific Microtab	35
Computer Discounts	08C	Pactronics	4, 41
Computermate	IFC, 47	Parcom	18, 32
Computer Spot	28 29 30 31	Polham	32
Desktop Utilities	32	Phoenix	50
EGP/EA	9	Power Peripherals	3, 5
Fonhot	10	Prime Artifax	54, 55
G P Software	62	Quadrant	39
Hard Disk Cals	44, 45, 46	Ramscom	25
Harris Hi-Tek	10	Rapsoft	13
Interlink	22, 23	Regional Computers	2
Island Software	18	Rhythmic Byn	11
Kawai	IBC	Red Irving	32
Loejan	18	Sigmacom	53
Logica	43	Unitech	71
Maxdrive	33	XEL	40
Sary McCleary	38		

The Dungeon by Kamikaze Andy

Well, the long awaited Amiga CDTV is almost upon us, and this month the Dungeon takes a look at the upcoming as well as potential RPGs that will appear on CD-ROM.

From all reports, there are nearly 100 software products for the CDTV within the first three months of its release, half of which are games. It is important to note that because of the unusual input device the CDTV uses (an infra-red remote control just like your VCR or TV controller), there might be some modifications made to the first few games on offer.

Later in the year, Commodore will bring out its mouse and keyboard options for the CDTV (both of which will also use infra-red input technology). This is good news, because most of us know that complex adventures and roleplaying games require mouse and keyboard to operate efficiently.

First wave

Well, what are the first adventures to be released? From Cinemaware come CDTV conversions of *Defender of the Crown* and *It Came From The Desert*. Both will be direct conversions of their Amiga originals, but will feature CD audio, digitized speech instead of text responses, and in the case of the latter game, digitized film footage of real live actors!

According to Cinemaware, this will be the trend for the "First Wave" of CDTV games. They will be direct conversions of established titles, but with added music, complete speech dialogue, and digitized stills. (Ed: Late reports indicate that Cinemaware is now defunct - let's hope these games aren't!)

Second Wave

At this stage, companies are trying to fill in the 500MB of CD space with such enhancements. When the "Second Wave" of games arrives, CDTV owners will get more original products that will make further use of the (hopefully by now released) mouse/keyboard.

Origin will put out a CDTV version of its spectacular space-combat simulator, *Wing Commander*, by the end of the year. *Ultima VII* is due for CDTV sometime next year, as is *Wing Com-*

mander II. Sierra's upcoming releases like *Leisure Suit Larry V* and *Police Quest III* (due at the end of 1991) might be CDTV candidates.

More definite games include ICOM's *Sherlock Holmes: Consulting Detective*, FTL's *Dungeon Master*, Lucasfilm's *Indy and the Last Crusade* (with film clips of Harrison Ford as *Indy*), and the Broderbund *Carmen Sandiego* series.

An original adventure game due out soon is *Detectron*, from *Defender of the Crown* designer - Kellyn Beck. This game is a detective adventure, and like others mentioned above, features digitized footage and lots of digitized speech.

Because *Detectron* was designed with the standard CDTV remote control in mind, the options are a little more limited than in other games. For example, each screen will have three options that you can select via remote control, and only three options. The storyline will develop as you get further into the game (something like a Choose Your Own Adventure system). Beck emphasizes that *Detectron* is an "exploratory" game, giving users the chance to see how the mystery turns out differently with each choice.

Success Factors

The eventual success of the CDTV format will hinge on the speed at which Commodore can produce two things.

The first is greater software support (although many companies have signed up, some giants like Electronic Arts are still wary of CDTV). A strong advertising campaign and, more importantly, consumer support from Commodore itself is vital for healthy CDTV sales.

The other important factor is how fast Commodore can come up with its promised CDTV converter for current Amigas. With over two million Amigas sold, Commodore can make a much better case for more software support if it can show that there are potentially two million CDTV owners out there already with the release of the CDTV adaptor.

Commodore also needs to release the mouse and keyboard options for CDTV very soon, as the remote control input device is very limited. I can hardly imagine how something as complex as *SimEarth* can be comfortably handled with the remote control device.

CDTV is an exciting prospect for all Amiga and computer owners, not only for adventurers. □

Realm Review Social Phobia

For the Commodore 128 and IBM-PC. Available via public domain.

Did you know that really good text adventurers still exist? The public domain libraries are full of them, and if you are looking for a good example of one then get your hands on *Social Phobia*, written by regular Realmer Alex Stivala and his merry crew.

This adventure should please science fiction fans, as it is based around two Mars satellites whose inhabitants are constantly at each others throats. On one side you have the trendy fearful Phobians, and on the other you have the ugly looking Demonic merphs.

The war between the two races does not involve physical weapons, but psychological ones.

Anyhow, it becomes apparent that the Phobians are losing, and they need more brainy beings to help them in the war. In their quest for more brains, you somehow get teleported from your Volkswagon.

So, you think the aim of the game is to help the Phobians succeed in their plight against the merphs and become the greatest hero since Flash Gordon?

If you are looking for a good text adventure then check out *Social Phobia*, written by regular realmer Alex Stivala and his merry crew.

Wrong! You decide to wimp out by not getting involved in this alien mind feud, and work out a way to return home. So begins the game of *Social Phobia*. The game is just pure detailed text with some humour scattered here and there. It features a full sentence parser, and a fairly reasonable vocabulary. There are not too many locations to visit, and the problems vary from straightforward to downright difficult.

My main criticism is that the play does tend to get knocked off fairly easily without much warning.

This game will probably only set you back a few dollars, and will supply you with many hours of fun and frustration. It most certainly gets the Realm's seal of approval! □

Making Music is easy with the **KAWAI FunLAB MUSIC SYSTEM**

INTRODUCING THE
COMPLETE MUSIC
SYSTEM FROM KAWAI



- No technical knowledge of MIDI is required to operate the software.
- No external amplification is needed.
- System operates on Amiga 500, 1000, 2000 and 2500.

THE KAWAI FunLAB MUSIC SYSTEM

HERE'S WHAT YOU GET...

KEYBOARD-

A 61 note keyboard with full size keys (colour colour co-ordinated with the Amiga), built in stereo speakers, 100 different studio sampled instrument sounds, 100 accompanying rhythms, programmable One Finger Ad Lib feature, and lots lots more.

SOFTWARE-

Steinberg FunLAB software is a 5 track sequencer (allowing overdubbing and multitrack recording) with music notation display, song lyric display, jukebox feature, optional 'quantize' or error correct and three demonstration songs.

MIDIINTERFACE-

Compact MIDI interface which fits directly into your Amiga serial port.

MIDI CABLES -

Two MIDI cables for connecting the KAWAI keyboard to the MIDI interface.

AVAILABLE FROM:

Computermart Pty Ltd, WA (09) 328 9799
Computer Discounts, NSW (02) 281 7411
Hard Disk Cafe, NSW (02) 979 5833
Chanticleer Computer Centre, NSW (067) 72 8888
United Computers, Qld (072) 82 6232

Casino Computers, NSW (066) 62 5220
Stephens Music Centre, NSW (047) 51 6196
Master Systems, Vic (03) 720 6722
Gray's Music, NSW (065) 72 1611
Norsoft, Qld (077 43 4777)



KAWAI

Sounds great!

Or contact:

KAWAI AUSTRALIA PTY LTD
PO BOX 189
WATERLOO NSW 2017
PH (02) 663 0571
FAX (02) 662 4726

DEALER ENQUIRIES
WELCOME

Please send me more information on the Kawai FunLAB Music System

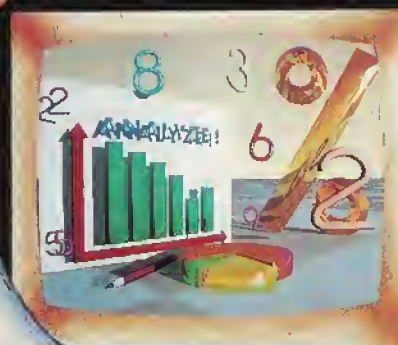
Name: Phone:

Address:

I own a:

COLORBURST

24/48 BIT GRAPHICS/VIDEO ENGINE



Actual untouched screen shots

16.8 MILLION COLORS ON YOUR AMIGA

- REALTIME IMAGE PROCESSING
- 1.5MB DISPLAY RAM
- ON-BOARD GRAPHICS PROCESSOR
- HIGH RESOLUTION 768 X 580
- PROFESSIONAL BROADCAST QUALITY PRODUCT
- PURE RGB OUTPUT - ENCODE TO ANY FORMAT - TOTALLY GENLOCKABLE
- INCLUDES 24 BIT PAINT PROGRAM
- LOADERS FOR IFF FILES, SCULPT, DIGIVIEW, 24 BIT RAY TRACED IMAGES, IMPULSE, DRAW4-PRO, BLITZ BASIC PRO, etc.

- CONNECTS THRU MONITOR PORT TO ALL AMIGAS
- COMPATIBLE WITH ALL AMIGA MONITORS
- NTSC/PAL/SECAM COMPATIBLE
- PROGRAMMABLE THRU COPPER, BLITTER, INTUITION
- 24 BIT DOUBLE BUFFERED ANIMATION AT 20fps
- 24 BIT PALETTE MAPPING
- COMPLEX COLOR CYCLING AND VIDEO EFFECTS
- REAL TIME HORIZONTAL AND VERTICAL SCROLLING
- 24 BIT STENCIL CAPABILITY ON DUAL PLAYFIELDS WITH FREEDOM TO MIX AMIGA AND COLORBURST GRAPHICS
- HARDWARE SUPPORT FOR 24 BIT DESKTOP PUBLISHING

M.A.S.T.

MEMORY AND STORAGE TECHNOLOGY P/L

19-21 BUCKLAND ST. BROADWAY 2007 Ph: (02)281-7411 Fax: (02)281-7414
U.S.A. (702)359-0444 GERMANY (0221)771-0918 SWEDEN (40) 93-1200

Thanks to ASDG for ADPro and Octree for bishops images.